

New Jersey. Coastal Zone Management Program

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COASTAL ZONE  
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FINAL REPORT

GLOUCESTER COUNTY  
STATE/COUNTY COASTAL COORDINATION PROJECT

Prepared by  
Gloucester County Planning Department  
January 1979

U. S. DEPARTMENT OF COMMERCE NOAA  
COASTAL SERVICES CENTER  
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This report was prepared under terms to the New Jersey Department of Environmental Protection, Office of Coastal Zone Management, with financial assistance under the provisions of Section 305 of PL92-583 Coastal Zone Management Act of 1972.

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## Preface

In April of 1978, Gloucester County, as well as nine other New Jersey counties, entered into an agreement with the New Jersey Department of Environmental Protection, Office of Coastal Zone Management (DEP, OCZM) to participate in a State County Coastal Coordination Project in conjunction with the State's evolving Coastal Zone Management Program. It was the feeling of DEP in contracting with the counties that the county level of government is more accessible and accountable to local citizens and attuned to local values, conditions and unique characteristics of the area, while also having a regional perspective beyond municipal boundaries.

The Coastal Coordination Project involved three major elements. First, the county was responsible for reviewing the State's evolving Coastal Management Program and for recommending County-specific revisions and additions. Second, the County would analyze the adequacy and consistency of state, county, and municipal coastal related plans, policies, and authorities and make recommendations to improve the decision-making process. Third, the County would promote inter-governmental coordination and public participation by serving as a county coastal clearinghouse to the public and officials from each municipality in the County.

Gloucester County's involvement in this project has enabled the County to review more thoroughly and remain abreast of ongoing DEP documentation and activities as the State's Coastal Management Program progresses, while also providing that local needs and desires, as well as County input, are considered during the Program's development.

## CHAPTER I

### Introduction - County Character

This chapter serves as an introduction, describing the current and projected character of the County--its resources, its patterns of development, its needs and its future concerns. Its purpose is to help provide a conceptual framework from which the reader might be able to better understand what is important to the County and why the recommendations that follow have been made.

## COUNTY CHARACTER

### Pattern of Development

Located within the Philadelphia Standard Metropolitan Statistical Area (SMSA), Gloucester County can generally be described as suburban in character. The City of Philadelphia is located adjacent to the County on the opposite side of the Delaware River, which bounds the County along its northwestern border. Though located within such close proximity of the nation's fourth largest city, many parts of Gloucester County have remained primarily rural in character. Approximately 80% of the County's 329 square miles are undeveloped with agriculture remaining as an integral part of the County's overall land use pattern. Generally speaking, most development is found in the northern and eastern portions of the County, while the southwestern and southern portions have remained basically rural.

With a fairly high rate of growth, however, Gloucester County has been becoming, in recent years, less rural and increasingly suburban in character. This suburbanization trend has been somewhat rapid in the eastern sections of the County, particularly in the Townships of Washington and Monroe, where growth patterns are typified by the prevalence of the development of low density single family detached residential subdivisions. Washington Township, for example, has grown from a rural community of 4,923 persons in 1960, to a growing suburb with an estimated 1978 population of 24,399. The northwestern portion of the County has also been experiencing growth recently in what was once an area of productive farmland with the development of the initial stages of a new town proposal (Beckett) and a major industrial park (Pureland).

Although much of Gloucester County can be characterized by its rural areas of highly productive farmland, its small towns, and its typically suburban residential areas, there does exist a variety of industrial uses within the County's municipalities that border the Delaware River, where, within the Philadelphia Region, heavy industry is predominant. Several large petroleum refining and petrochemical production facilities are located in the County directly along the Delaware River, while there are also several large industrial parks located along rail and interstate highway facilities (I-295) that parallel in close proximity to the Delaware River. The two riverfront municipalities of Greenwich and West Deptford Townships alone account for nearly one-half the total amount of land

devoted to industrial uses that exist in the entire County.

The extent to which industry, and particularly petroleum related industry, dominates the Delaware Riverfront can be shown in an inventory of industrially owned land that was previously prepared for the Planning Department's Gloucester County Outer Continental Shelf and Energy Facilities Planning Study covering the municipalities bordering the Delaware River--Westville Borough, West Deptford Township, National Park Borough, Paulsboro Borough, Greenwich Township, and Logan Township. (See Table 1 ) Among the industrial facilities that occupy significant tracts of land are the Texaco Refinery (1,196 acres) and Shell Chemical (610 acres) in West Deptford Township, the Mobil Refinery (749 acres) and DuPont (1804 acres) in Greenwich Township, and Pureland (1620 acres) and Monsanto (460 acres) in Logan Township.

While these facilities consume large amounts of the Delaware Riverfront, there remains many expansive areas of undeveloped land along the River. The land area of West Deptford Township, for example, is 58% undeveloped, that of Greenwich Township is 65% undeveloped and that of Logan Township is 91% undeveloped. Most of this land, however, although undeveloped, is presently owned by various industries. Significant large undeveloped tracts include 1100 acres in West Deptford Township owned by Tenneco that had previously been proposed for a liquified natural gas (LNG) terminal, 1600 acres in Logan Township that Shell Oil had proposed for an oil refinery, and 2300 acres owned by American Dredge in Logan Township, part of which had been proposed by Transco for a liquified natural gas (LNG) terminal. Map 1 demonstrates the extent to which industry owns land along the Delaware River in Gloucester County.

#### Future Trends

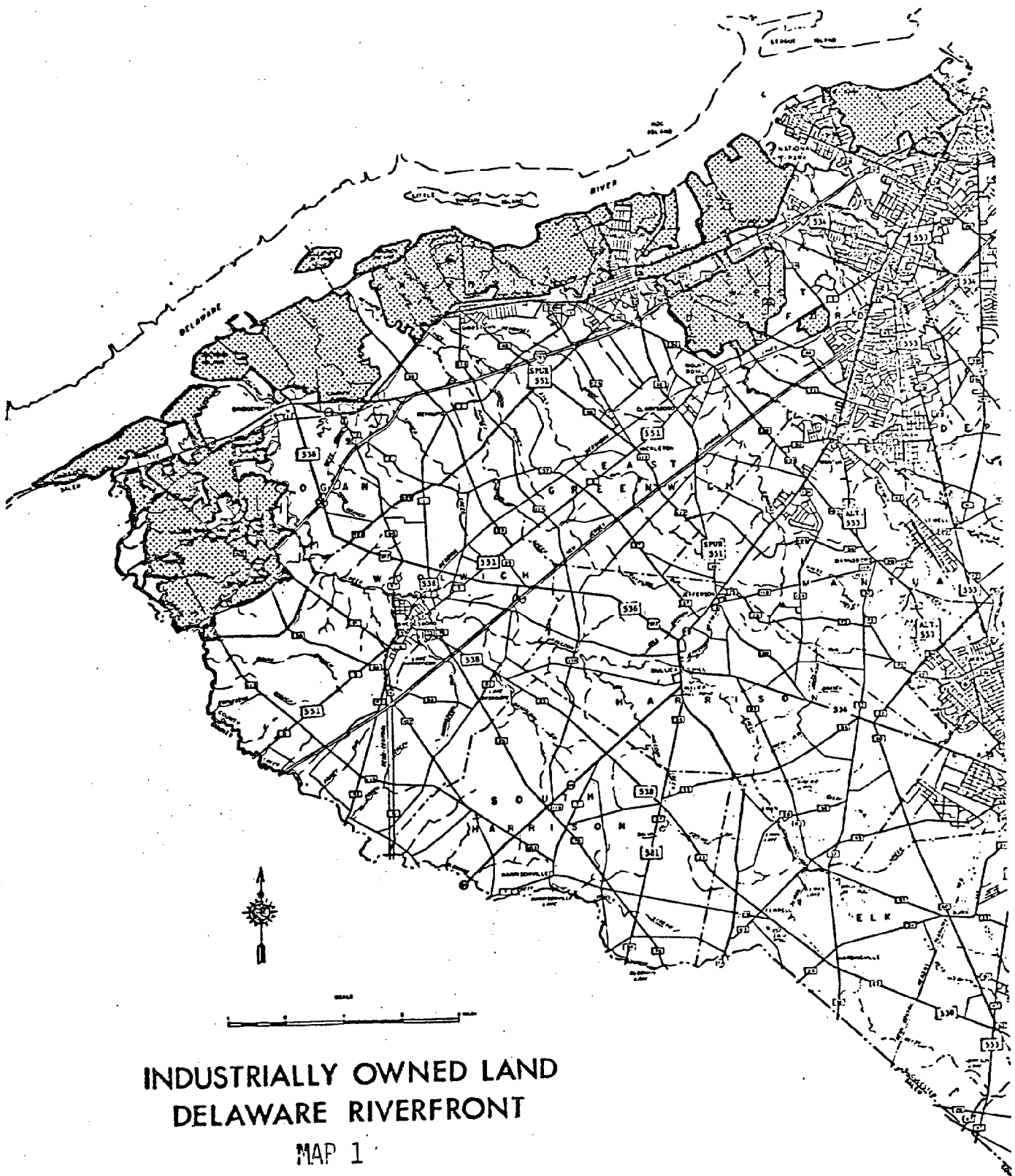
Considering the large number of sizable tracts of land presently being held by industry along the Delaware Riverfront, it would appear that some type of industrial development can be expected to continue in the area in the future. This could be further accelerated with the impetus from such an occurrence as successful offshore oil and gas development in the Baltimore Canyon off the New Jersey Coast. At present, industrial development in this area has been concentrating primarily in two industrial parks, Mid-Atlantic and Pureland. Mid-Atlantic Industrial Park is 600 acre tract located in West Deptford Township directly south of the Tenneco site. The Park is currently developing, with approximately two



TABLE 1

INDUSTRIALLY OWNED ACREAGE

<u>Municipality</u>	<u>Industry</u>	<u>Acres</u>	<u>Municipality</u>	<u>Industry</u>	<u>Acres</u>
Greenwich	American Dredge	21	Logan	Sun Oil	558
	Carroll Manufacturing	1		Monsanto	460
	Sun Pipe	5		Pureland	1,620
	Atlantic City Electric	49		American Dredge	2,282
	Hercules Corp.	302		Polyrez	35
	Houdry Chemical	5		Shell Oil	1,544
	DuPont	1,804		Logan Indus. Enterprises	57
	Mobil	747		Chemical Leasing Co.	13
	TOTAL	2,934		Chemical Leaman Tank	18
				TOTAL	6,587
National Park	PSE&G	20	Westville	Texaco	29
Paulsboro	Essex Chemical	26	West Deptford	Texaco	1,196
	BP	111		Pennwalt	244
	Olin Mathieson Chem. Corp.	41		PPG Industries	2
	Hercules Corp.	10		Mantua Chemical Terminal	46
	PPG Industries	29		Paktank	7
	Mantua Chemical Terminal	23		Gen. Amer. Trans. Corp.	377
	Paktank	23		Tenneco	1,139
	Petro Tex Terminal Corp.	4		National Steel	222
	General Trans. Corp.	26		ARCO	25
	Coastal Service, Inc.	3		Shell Chemical	610
	Central Piping	8		Gulf	35
	Mobil	40		Sohio	57
	Sun Oil	8		Colonial Pipeline	58
	Exxon	39		TOTAL	4,108
	Pennsylvania Petro	1			
	Carroll Manufacturing	2			
	TOTAL	394			



hundred acres of the six hundred acre site developed. Approximately 330 acres remain for the development of light industry and 70 acres for heavy industry. Pureland is located in Logan Township on a 3000 acre tract. Approximately one-third of the tract is owned by Shell Oil Corporation, which had proposed to build an oil refinery in 1973. Excluding the area that is presently owned by Shell, and also excluding wetlands, riparian lands, marshes, etc., Pureland has approximately 1000 acres that are buildable. To date, Pureland has developed 55 acres, with a total of 888,000 square feet of building area.

Residential development is also expected to continue within the proposed coastal area, primarily due to the growth of Beckett New Town. Although only a limited amount of Beckett New Town itself is located directly within the proposed coastal zone, it can be expected that the magnitude of scale of the development will influence additional peripheral residential development within the coastal zone. Initiated in 1973, the first stage of Beckett, located in Logan Township, consists of approximately 800 acres extending south of I-295 from Raccoon Creek to Oldmans Creek. Currently developing as a PUD, with approximately one quarter completed, total buildout in Logan Township will include a housing mix of 2800 units, as well as a village shopping center, schools, a golf course, an industrial-office park, a highway commercial center, and parks and open space. The remainder of the development, approximately an additional 1700 acres and including a maximum of 9200 dwelling units, has been proposed in Woolwich Township, south of this first phase. Initial stages will involve primarily low and medium density residential development, followed by medium high density residential and commercial development in the fifth year and high density residential development in the seventh year. Completion of all stages is expected to take 13-17 years. Total development of the new town in both Townships is expected to house a population of approximately 40,000 persons. In addition, Eagle Farms, another PUD in its early stages of development, located adjacent to Beckett in Logan Township, is expected to house 1700 persons upon its completion.

Continued development, particularly residential development, is also expected to continue in the future in the eastern sections of the County. Development here has been spurred, at least in part, by the availability of sewerage provided by the Gloucester County Regional Sewage Treatment Plant, which began operations in the early 1970's. The completion of two proposed transportation facilities, Route 55 and the PATCO High Speed Line extension, would undoubtedly generate further

development in this area. Route 55 is a proposed major limited access highway that would link the North-South Freeway in the northeast part of the County to the present termination of Route 55 near the Gloucester County-Cumberland County border. The PATCO High Speed Line proposal would provide an extension to Glassboro of the highly successful mass transit commuter line that links South Jersey to the City of Philadelphia.

### Population Growth

Gloucester County has been experiencing a fairly rapid rate of population growth. The County's population was 134,840 in 1960, 172,681 in 1970, and has been estimated as being 204,586 in 1978, representing a growth rate of over fifty percent during this eighteen year period. This growth has not occurred uniformly among the County's 24 municipalities. Some municipalities have shown an actual decline in population during this period, while the County's eastern Townships have experienced dramatic growth. (See Table 2 ) The County population's proportionate distribution of age, sex, and race has remained surprisingly stable despite these population shifts. Approximately sixty percent of this growth has been from net in-migration.

Population growth has not been as rapid during the past eighteen years in the proposed coastal area as it has in the County as a whole. (See Table 3 ) Population growth in the municipalities that directly front on the Delaware River (Westville, West Deptford, National Park, Paulsboro, Greenwich, and Logan) has shown a 27% increase since 1960, as compared to the County's overall growth rate of 51%. In addition, 62% of this increase along the Delaware River has occurred in West Deptford Township alone. It should be noted, however, that Logan Township, which experienced an actual net decrease in population from 1960 to 1970, is beginning to experience population growth as Beckett New Town develops within the municipality.

TABLE 2

POPULATION CHANGE

Municipality	1960	1970	1978 Est.	Change 1960-1978	1985 Est.
Clayton	4,711	5,193	5,488	777	5,789
Deptford	17,878	24,232	29,018	11,140	32,497
East Greenwich	2,722	3,280	3,531	809	3,846
Elk	2,635	2,707	2,993	358	3,133
Franklin	7,451	8,990	10,063	2,512	11,078
Glassboro	10,253	12,928	16,853	6,600	19,422
Greenwich	4,065	5,676	6,284	2,219	7,145
Harrison	2,410	2,661	2,938	527	3,141
Logan	1,924	1,840	2,627	703	5,622
Mantua	7,991	9,643	10,477	2,486	11,443
Monroe	9,396	14,071	19,783	10,387	23,822
National Park	3,380	3,730	3,905	525	4,108
Newfield	1,299	1,487	1,682	383	1,829
Paulsboro	8,121	8,084	7,976	(145)	7,920
Pitman	8,644	10,257	10,908	2,264	11,790
South Harrison	974	1,226	1,375	421	1,529
Swedesboro	2,449	2,287	2,265	184	2,195
Washington	4,923	15,741	24,399	19,476	31,973
Wenonah	2,100	2,364	2,536	436	2,704
West Deptford	11,152	13,928	16,897	5,745	19,130
Westville	4,951	5,170	5,118	167	5,181
Woodbury	12,453	12,408	12,005	(498)	11,830
Woodbury Hts.	1,723	3,621	4,408	2,685	5,451
Woolwich	1,235	1,147	1,057	(178)	3,872
COUNTY	134,840	172,671	204,586	69,983	236,450

TABLE 3

POPULATION CHANGE - DELAWARE RIVERFRONT MUNICIPALITIES

Municipality	1960	1970	1978 Est.	Change 1960-1978	1985 Est.
Greenwich	4,065	5,676	6,284	2,219	7,145
Logan	1,924	1,840	2,627	703	5,622
National Park	3,380	3,730	3,905	525	4,108
Paulsboro	8,121	8,084	7,976	(145)	7,920
West Deptford	11,152	13,928	16,897	5,745	19,130
Westville	4,951	5,170	5,118	167	5,181
TOTAL	33,593	38,428	42,807	9,214	49,106

## Natural Resources

### Geology and Groundwater

Gloucester County is located entirely within the Atlantic Coastal Plain physiographic province. The County's topography is therefore relatively flat and gentle, ranging from elevations of below mean sea level to approximately 170 feet above sea level. The County is underlain by over fifteen geologic formations which are characterized by their gentle slope to the southeast, away from the Delaware River. As a result, the older formations appear near the surface at the Delaware River and become progressively deeper inland from the River. (See Map 2 )

The Raritan and Magothy Formations are the most productive aquifers in the County, supplying about 75% of the groundwater used in the County, followed by the Cohansey Sand Formation, and the Wenonah and Mount Laurel Formation. (See Table 4 ) The Raritan and Magothy Formations crop out along the Delaware River in a strip several miles wide and cover fourteen percent of the County's land area. Wells in these formations are capable of providing water at the rate of 1400 gallons per minute. The quality of groundwater in the Raritan and Magothy Formations is influenced by such factors as the quality of the Delaware River water, the potential for saltwater intrusion in the northwestern portion of the County, potential industrial contamination in the outcrop area along the Delaware River, and potential contamination from any of the formations overlying the aquifers.

It is essential that prime aquifers and critical recharge areas are well managed and protected. Development activities should be prevented from contaminating the outcrop areas of prime aquifers, or reducing their recharge capacity. The County Planning Department's Natural Resource Planning Study recommends detailed on-site filed investigation made prior to development in order to assess the impact of the proposed activity on the aquifer and its recharge capacity. Development and landfills disposing toxic wastes, biological discharges or sewage should be prevented from locating on lands underlain by aquifers where contamination of groundwater is possible.

### Surface Water

Gloucester County is divided into three major drainage basins. The Delaware River Basin is located in the northern portion of the County while the Maurice and Great Egg Harbor River Basins are located in the southern half of the County.





Controlling the surface drainage in the County is a low ridge crossing the central portion of the County in a generally east-west direction which separates the Delaware River Basin from the two southern basins.

The northern streams of the Delaware River Basin all flow to the Delaware River. There are four major streams in the Basin: Oldmans Creek, Raccoon Creek, Mantua Creek, and Big Timber Creek. These streams are tidal as far as six to eight miles inland. There are also five smaller tidal streams within the Delaware River Basin: Little Timber Creek, Repaupo Creek, Nehansey Brook, Clonmell Creek, and Woodbury Creek. (See Map 3 )

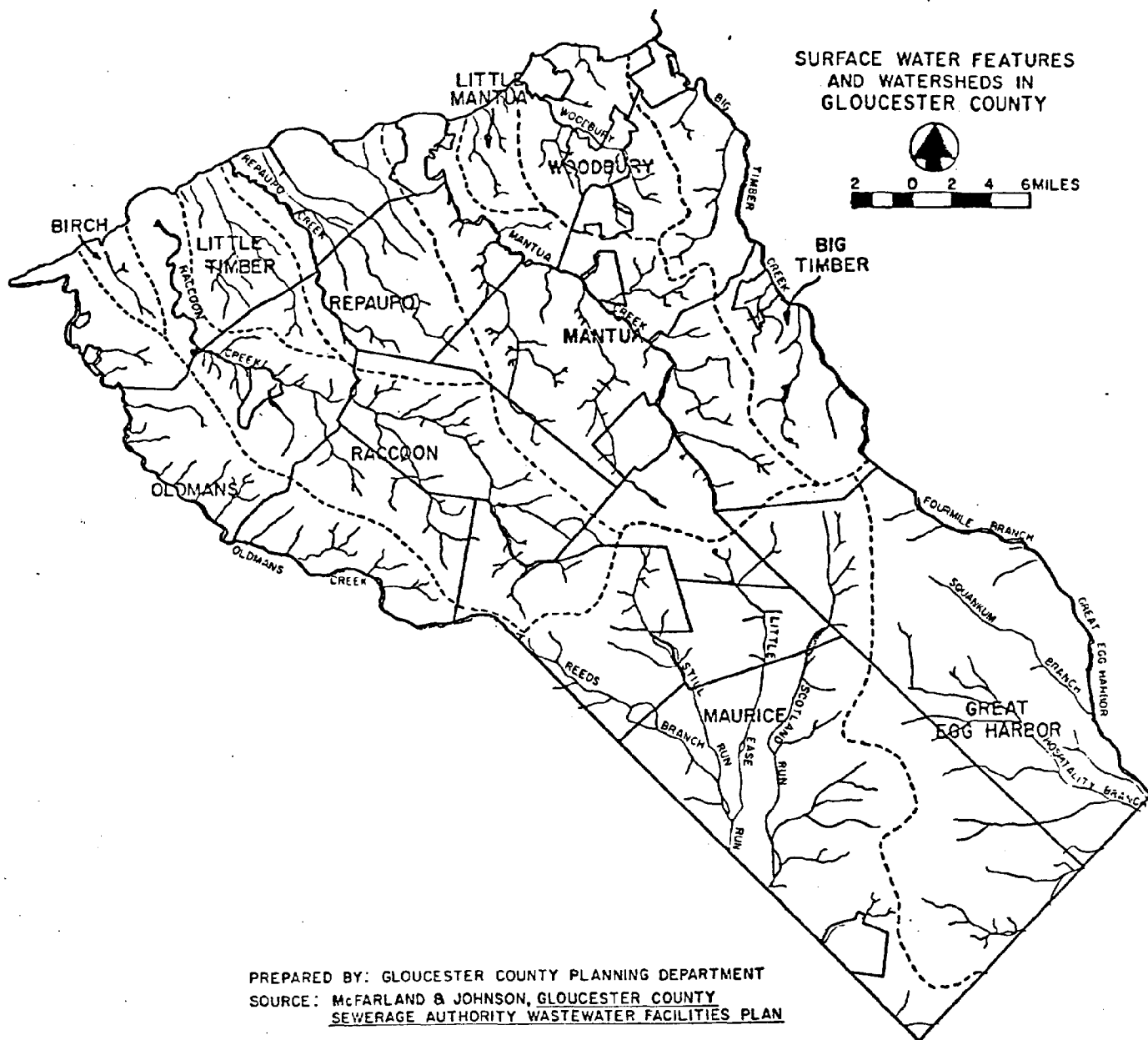
### Soils

Gloucester County has seventy seven (77) soil classifications, which are categorized into nine broad soil associations. Six of the associations roughly parallel the Delaware River, like the geologic formations that are below them, while the other three conform to the natural drainage systems within the County. Among the associations significant to the proposed Delaware River coastal area are the Downer-Woodstown-Sassafras-Kleg Association (DWSK), the Keyport-Lenoir-Elkton Association (KLE), the Muck-Alluvial Land Fallsington-Pocomoke Association (MAFP) and Tidal Marsh (TM). (See Map 4 )

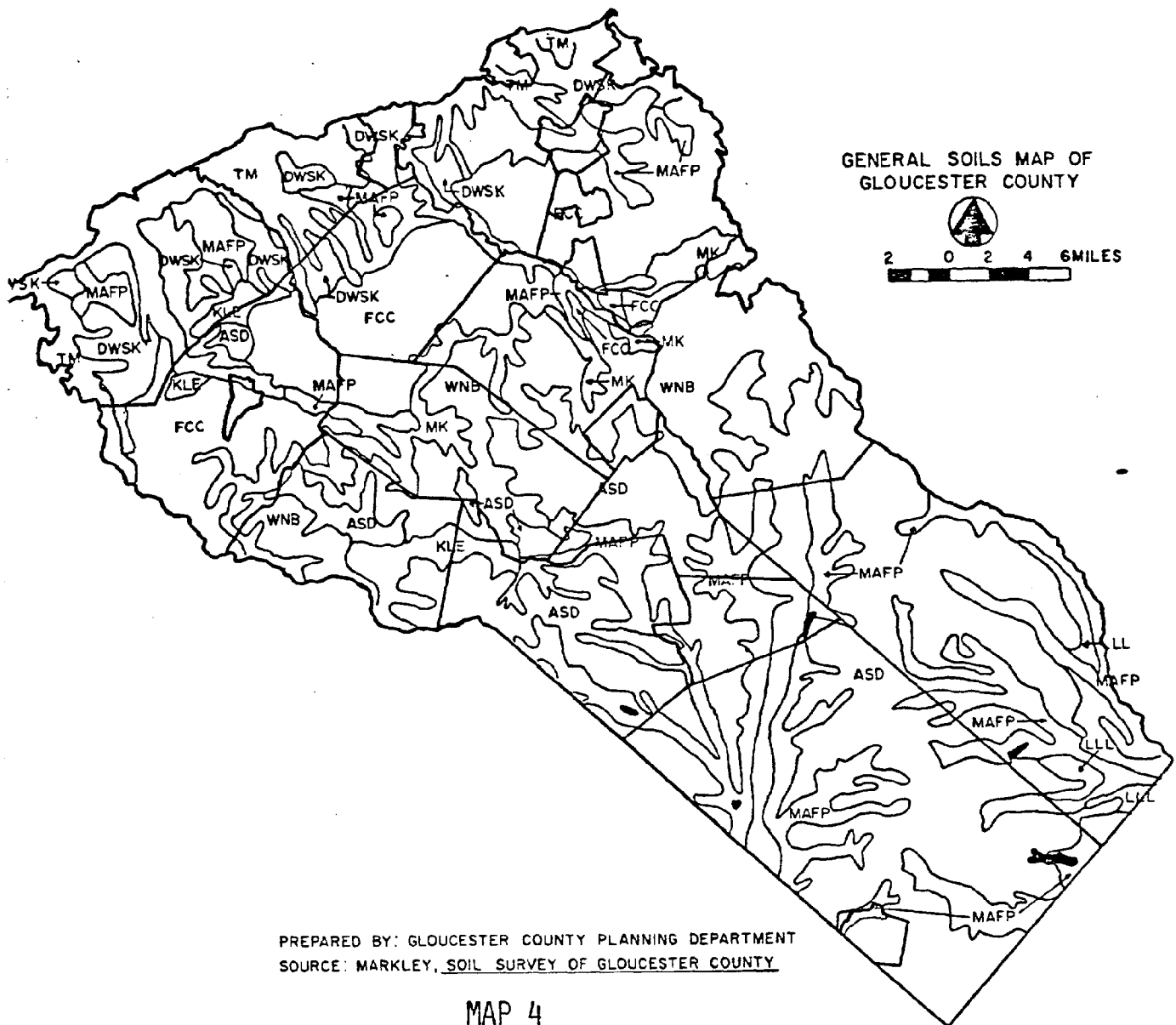
The Downer-Woodstown-Sassafras-Kleg Association (DWSK) extends across the County in a generally east-west direction as a discontinuous belt paralleling the Delaware River. Most areas are flat, ranging in elevation from 10-40 feet. Most areas have been cleared and much of it is used for vegetable farming. A good portion, however, is also being held for industrial development due to its location along the Delaware River.

The Keyport-Lenoir-Elkton Association (KLE) is located in areas south of Bridgeport and northwest of Swedesboro. These soils are characterized by gentle slopes subject to severe water erosion, wetness, and high water table. These soils are poorly drained with clay subsoils preventing the water from passing through.

The Muck-Alluvial Land-Fallsington-Pocomoke Association (MAFP) consists of level, narrow, inland wet soils that occur along streams. Alluvial land is extensive along the Delaware River. These soils are subject to flooding, have a high water table, are poorly drained, and are wet most of the time.



MAP 3



GLOUCESTER COUNTY STATE/COUNTY  
COASTAL COORDINATION PROJECT

NS-679

GLOUCESTER COUNTY PLANNING DEPT.

TABLE 4 GEOLOGIC FORMATIONS AND THEIR WATER BEARING  
CHARACTERISTICS IN GLOUCESTER COUNTY

GEOLOGIC FORMATION	MAP SYMBOL	THICKNESS (FEET)	WELL YIELDS (GALLONS PER MINUTE)	RANGE IN WELL DEPTHS (FEET)	LITHOLOGY
Wissahickon (subsurface)	WGN	5,000 - 8,000	-----	-----	schist or gneiss
Raritan and Magothy	KMR	150-500	up to 1400	70-350	clay and sand
Merchantville	KMV	45-70	15 - 100	100-155	clay, some sand
Woodbury Clay	KWB	50-80	0	--	clay
Englishtown	KET	0-50	20 - 100	50-160	sand, slight clay
Marshalltown	KMT	10-40	40 - 100	100	clay, sandy in places
Menonah and Mount Laurel Sand	KMN	65-95	up to 200	35-200	sand
Navesink	KNS	0-40	10 - 50	--	clay and sand
Hornerstown	THT	8-30	10 - 50	--	clay and sand
Vincentown	TVT	0-55	10 - 150	85-150	limy sand and limestone
Manasquan (subsurface)	---	0-25	0	--	sand and clay
Kirkwood	TKW	50-160	10 - 50	25-100	sand, clay, some gravel
Cohansey	TCH	0-130	up to 800	25-130	sand, clay and gravel
Bridgeton	QBT	0-50	10 - 50	--	sand and gravel
Pensauken	QPS	0-30	10 - 50	--	sand and gravel
Cape May	PCM	0-40	10 - 50	--	sand, gravel and clay
Alluvium	QAL	0-40	0	--	mud, silt, and sand

Source: Hardt and Hilton, Water Resources and Geology of Gloucester County

Tidal Marsh (TM) is covered daily by water due to its near sea level elevation. It occurs primarily along the Delaware River and its tributaries that are tidally influenced, particularly along the Mantua, Raccoon, Repaupo, Still Run, and Oldmans Creeks.

#### Prime Agricultural Land

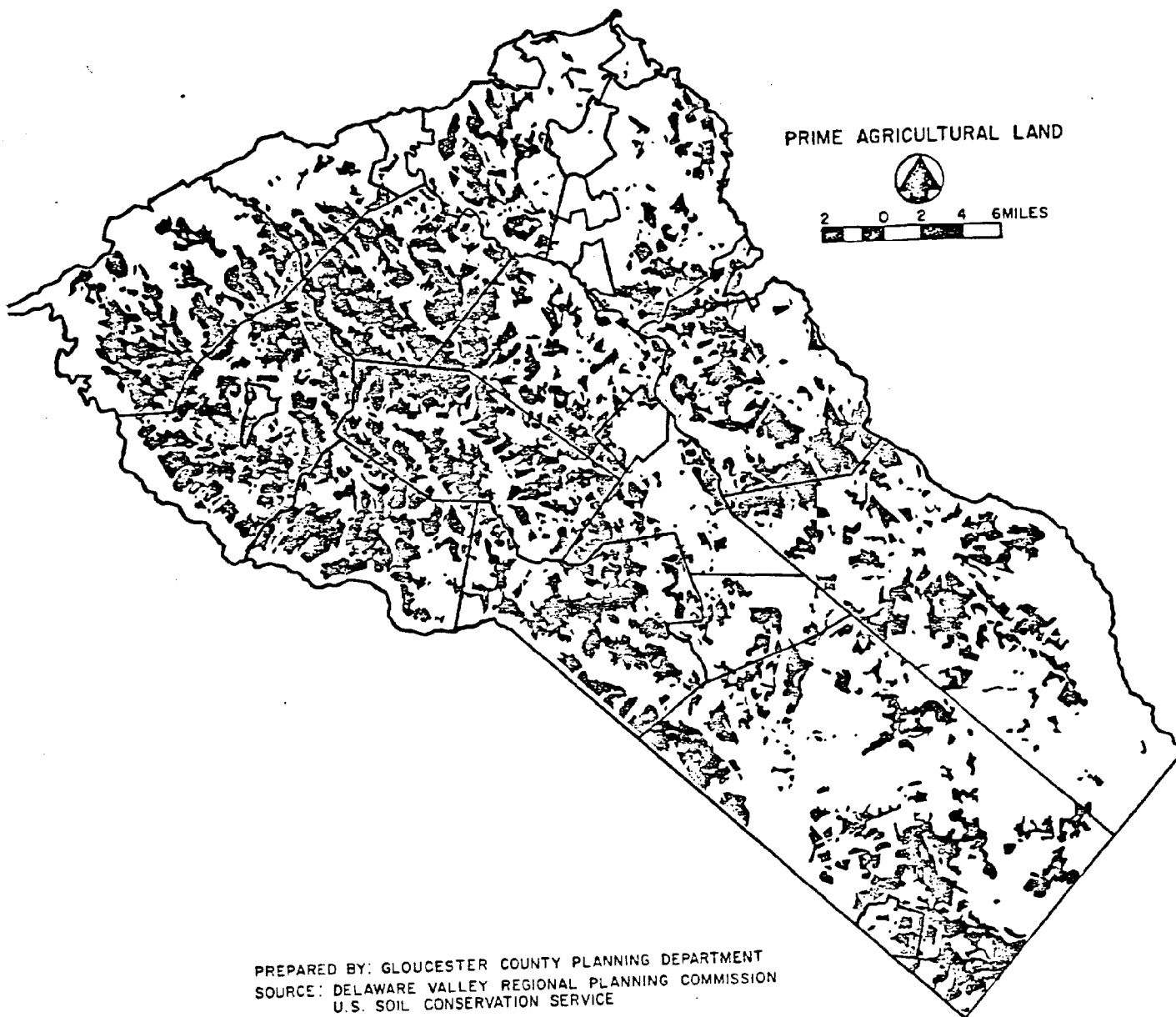
Prime agricultural land, Class I and Class II soils designated by the U.S. Soil Conservation Service, are highly productive soils which are suitable for intensive cultivation and have few natural or man-made limitations. Approximately one-third of the County's total land area can be considered prime agricultural lands. Large parcels of contiguous prime agricultural soils are located within this proposed coastal zone, particularly in the Townships of East Greenwich, Logan, and Woolwich.

Prime agricultural soils are subject to intensive development pressures, however. In Gloucester County, agricultural lands have been on the decline for the past two decades. Recently, this trend has accelerated due to the increased amount of residential development occurring within the County. In 1974, there were about 64,000 acres of farmland in cropland use in the County, representing an approximate 10,000 acre decrease from 1969. It is expected that farmland will experience further losses in light of continued residential, commercial, and industrial development.

In attempting to mitigate the impact of this trend, the County Planning Department's Natural Resource Planning Study has recommended that selected prime agricultural lands should be preserved and maintained in agricultural production in order to assure its permanence within the economic base and physical character of the County. It should be further noted that the County's more rural municipalities have zoned large areas of their Townships for low density-agricultural types of uses.

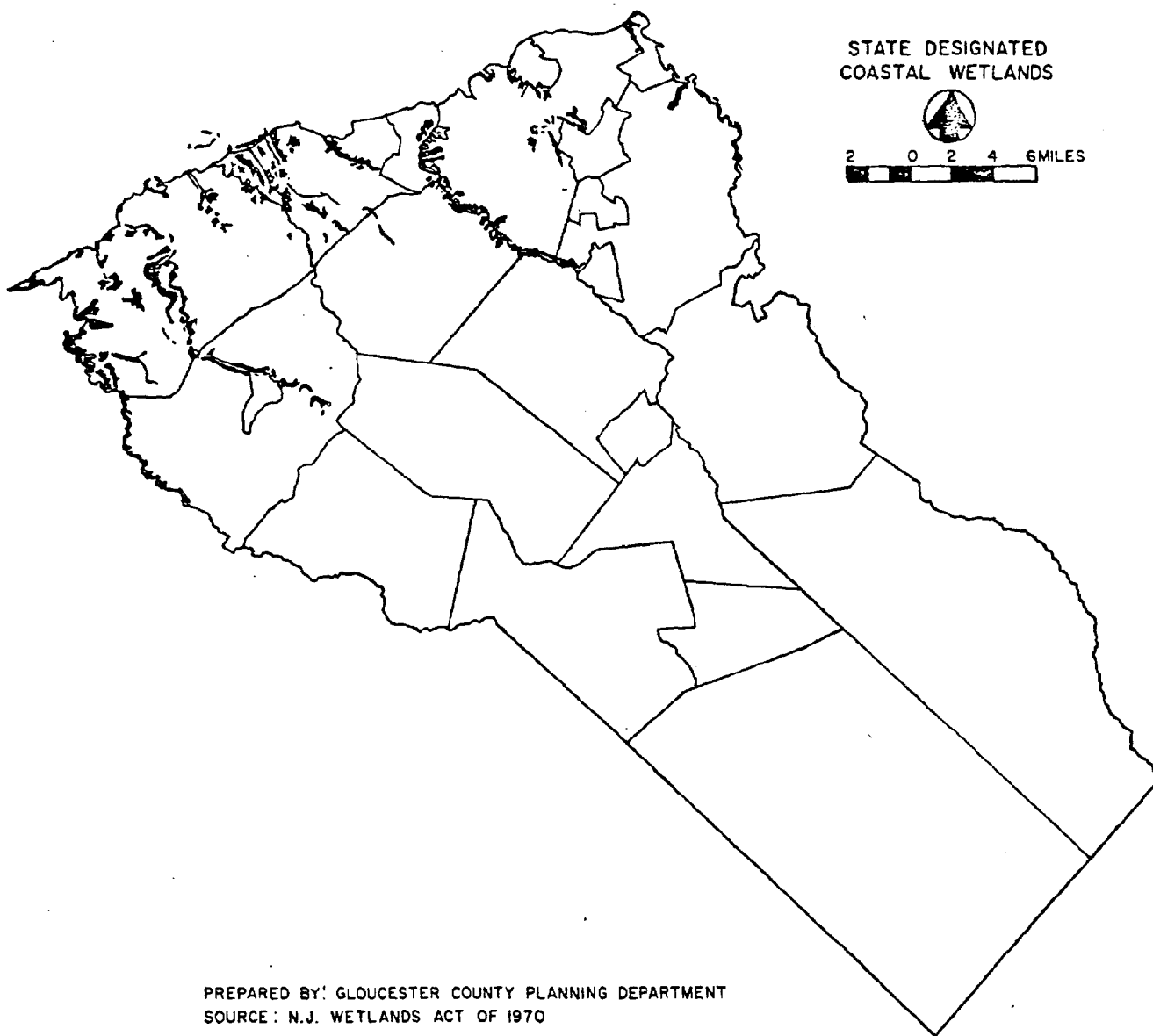
#### Wetlands

Wetlands, as defined in accordance with the provisions of the Wetlands Act of 1970, are any marsh, bank, swamp, meadow, or other lowland covered by year round or intermittent shallow water that is subject to tidal action and is capable of growing certain vegetation. In Gloucester County, coastal wetlands are located along the Delaware River and its tributaries, including Oldmans,



PREPARED BY: GLOUCESTER COUNTY PLANNING DEPARTMENT  
SOURCE: DELAWARE VALLEY REGIONAL PLANNING COMMISSION  
U.S. SOIL CONSERVATION SERVICE

MAP 5



PREPARED BY: GLOUCESTER COUNTY PLANNING DEPARTMENT  
SOURCE: N.J. WETLANDS ACT OF 1970

MAP 6



Raccoon, Repaupo, and Mantua Creeks. Coastal wetlands are very susceptible to degradation and vulnerable to abuse due to dredging, filling, or construction, while serving many vital environmental and economic functions.

#### Flood Prone Areas

Flood prone areas are defined as relatively flat areas adjoining the channel of a natural stream which have been or may be periodically covered with floodwaters, acting as extensions of stream channels during periodic stream overflows. Indiscriminate development of flood prone areas should therefore be avoided, since it could adversely affect the areas natural capacity to carry storm water and may result in property damage. There are approximately 26,000 acres in Gloucester County that can be defined as flood prone, comprising 12 per cent of the County's total land area. Extensive flood prone areas can be found in the vicinity of the Delaware River, particularly in Logan and Greenwich Townships.

#### Forest Areas

Much of Gloucester County's forest areas are located in the southern half of the County. Forest areas in the proposed coastal zone are limited primarily to flood prone areas, streambanks, slopes, and wet areas. Overall, woodlands occupy approximately 65,000 acres, representing about 30 percent of the County's land area. Over the past five years, woodlands have decreased by about 1500 acres, representing a loss of about 2.3 percent of the County's total forest areas, with most of this loss occurring in the developing eastern portions of the County. Wooded areas serve many valuable environmental and social functions that would cease if these areas were permitted to be destroyed.



MAP 7

### Economy

Employment in Gloucester County is concentrated in five categories: manufacturing, wholesale and retail trade, services, state and local government, and non-farm proprietorships, comprising 82.3% of the total employment in Gloucester County. In addition, employment in the County in manufacturing industries is concentrated in four industrial classifications: petroleum and coal products (SIC 29), electrical and electronic equipment (SIC 36), chemical and allied products (SIC 28) and fabricated metal products (SIC 34), comprising 64% of the County's total manufacturing employment. This relatively high concentration of employment in a few industries therefore makes the County's economy susceptible to changes in a few areas of employment.

In addition, with almost half of its employed residents working at jobs outside the County, Gloucester County can clearly be defined as a suburban "bedroom" County. Approximately one-quarter of the total income earned by County residents is derived from the net export of labor. The economic health of Gloucester County is therefore greatly dependent on that of the whole SMSA.

However, in recent years, Gloucester County would appear to generally be a growth area within an otherwise stalled SMSA. Total employment increased 16.4% in Gloucester County from 1970 to 1976, but only 0.9% in the SMSA. From 1970 to 1974, total payroll increased 46.2% in Gloucester County but only 29.8% in the entire SMSA. Employment in manufacturing in Gloucester County grew steadily from 1970 to 1976, from 12,972 manufacturing jobs to 13,784, while it declined in the overall Philadelphia SMSA as well as the entire United States. Most of this employment growth in the County has been provided by the County's principal industries, particularly petroleum refining (which accounts for almost one-fourth of all County manufacturing jobs) and the migration of industries from high cost urban areas, both within and outside the SMSA.

Much of this employment growth is therefore occurring in the proposed coastal zone, since it is in this area that the County's refining industries are located, as well as its major industrial parks, Pureland and Mid Atlantic, which has been experiencing much of this in-migration of industries. It should be further noted that the Delaware River area has traditionally been the County's primary employment center.

## Recreation and Open Space

Gloucester County currently operates two parks within the proposed coastal zone, Greenwich Lake Park, which it leases from Greenwich Township, and Red Bank Battlefield, which is federally owned. Greenwich Lake Park is a 48 acre site located north of I-295 that provides picnicking, fishing, boating, and swimming. Red Bank Battlefield, which is one of the few public access points to the Delaware River, is a twenty two acre historical site that provides for picnicking, tot lot and free play areas. The County has currently made application to NJDEP under the Green Acres Program for the acquisition of an additional six acres to the site. The County has also included in its five year Park, Recreation and Resource Conservation capital program submitted to the NJDEP a site acquisition proposal for a water fowl sanctuary along the Delaware River in the Cedar Swamp area of Logan and Greenwich Townships. The water fowl sanctuary, which has been proposed in conjunction with the Philadelphia Zoological Society, would help serve the County's passive recreation needs of open space preservation and natural resource conservation.

At the municipal level, each of the larger Townships along the Delaware River, West Deptford Township, Greenwich Township, and Logan Township, discuss providing increased open space opportunities within the proposed coastal zone and public access to the Riverfront. Logan Township's draft master plan update recommends that two parks, one near Floodgate Road and the other near Raccoon Creek, be connected by a linear park along the Delaware and subsequently tied into the community through an open space system. Greenwich Township's Development Plan proposes two stream valley park belts, one along Nehaunsey Branch and the other along Clonmell Creek, and a riverfront park along Floodgate Road. West Deptford Township's revised Land Use Element recommends conservation designations to include flood plain areas and wetlands along the Delaware River, along Hessian Run, along Mantua Creek and along other stream valleys in the Township. In addition, the Township has presently made application through Green Acres for the acquisition of a twenty acre River Gate Park along the Delaware River.

## CHAPTER II

### State Coastal Planning Program and the County Implications and Recommendations

This chapter discusses the implications of the New Jersey Department of Environmental Protection, Office of Coastal Zone Management's proposed Coastal Management Program for Gloucester County and makes recommendations regarding the proposed coastal boundary and coastal policies.

## IMPLICATIONS AND RECOMMENDATIONS

Under the guidelines of the federal Coastal Zone Management Act, the New Jersey Department of Environmental Protection, Office of Coastal Zone Management (NJDEP-OCZM) has been developing a Coastal Zone Management Program, which includes the development of various locational, use, and resource policies. These policies are to be used by DEP, as well as other relevant state agencies, to evaluate significant proposed development activities within the coastal zone. In addition, under the "consistency" rule of the Coastal Zone Management Act, federal actions must also conform to the Program's policies. A coastal management program report documenting these policies, entitled Coastal Management Program - Bay and Ocean Shore Segment, has recently been completed by DEP and has been submitted to the federal National Oceanic and Atmospheric Administration (NOAA) for approval. This first segment document covers essentially the portion of the New Jersey Coast that is under the jurisdiction of the Coastal Area Facilities Review Act (CAFRA), an area that extends along the Atlantic Coast from the Raritan Bay to Cape May Point and up the Delaware Bay almost to the Delaware Memorial Bridge.

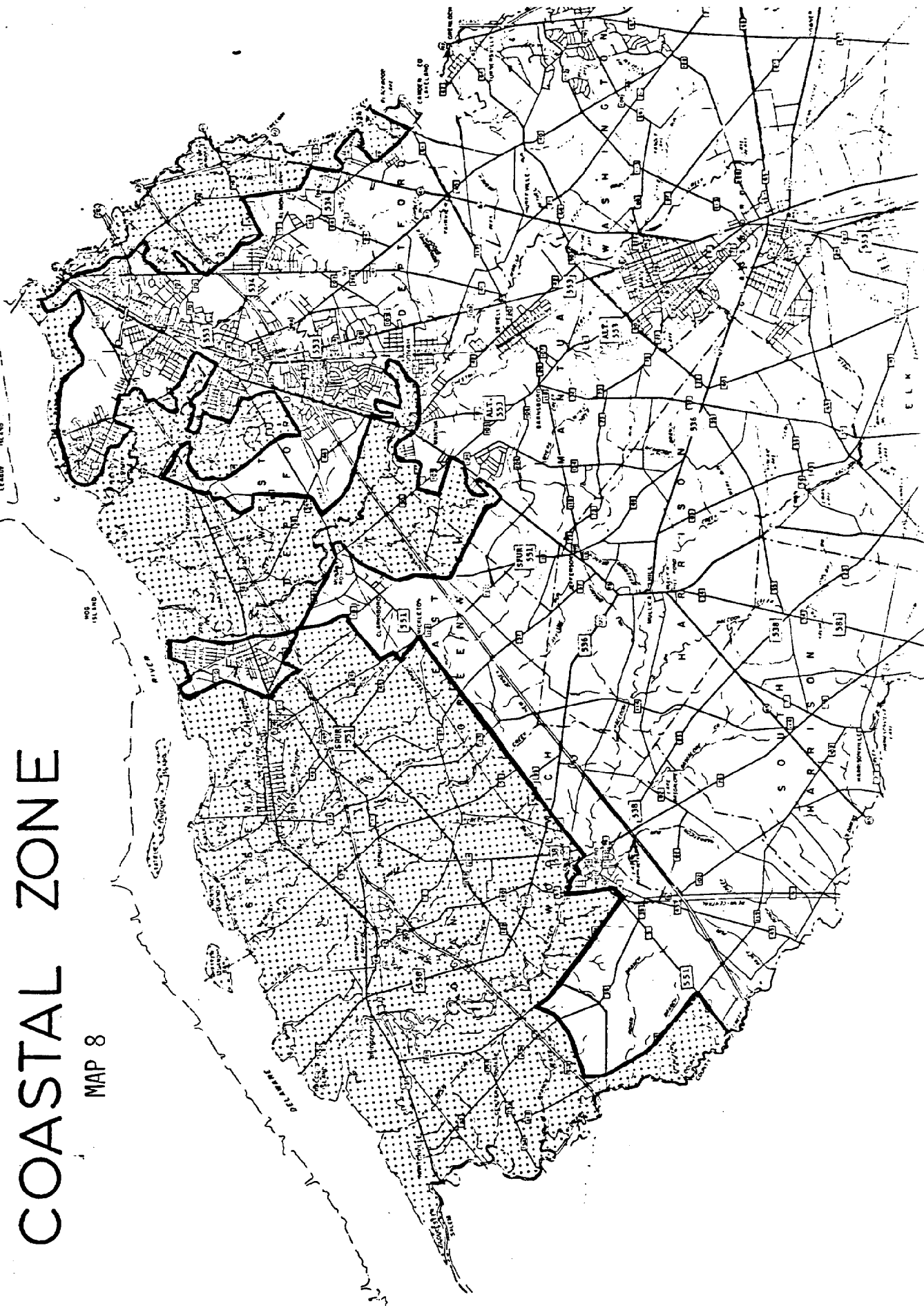
Although Gloucester County is not directly affected by the policies set forth in the Coastal Management Program - Bay and Ocean Shore Segment, the preparation by DEP of a similar second segment document is expected for the Delaware River and Hudson River waterfront areas. Major areas along the Delaware River and its tributaries of tidal influence have been proposed for inclusion into this coastal management program, including all or at least part of thirteen municipalities in Gloucester County (See Map 8 ) which are as follows:

Deptford Township	Swedesboro Borough
East Greenwich Township	Wenonah Borough
Greenwich Township	West Deptford Township
Mantua Township	Westville Borough
National Park Borough	Woodbury City
Logan Township	Woolwich Township
Paulsboro Borough	

The criteria that DEP has used in determining the preliminary boundary of the proposed coastal zone consists of the nearest cultural feature to the Delaware River and its tributaries of tidal influence. The cultural features used are linear, continuous, and easily and legally recognizable. Tributaries of

# PROPOSED DEP-OCZM COASTAL ZONE

MAP 8



tidal influence were defined as waters draining into recognized tidal waters (the Delaware River) to the point where the 20 foot contour line crosses their watercourse. This arbitrary elevation was recommended by DEP's Office of Environmental Analysis as appropriate for indication of the approximate maximum extent of tidal influence, since most tidal influence occurs within the first 20 foot elevation. Floodgates were not considered to impede tidal inundation.

Because of the characteristically flat terrain of the area, many streams and creeks defined as tidally influenced extend far inland, (as much as ten miles) from the Delaware River. Moreover, in many cases (particularly in sparsely developed areas) the first cultural feature is located a significant distance from the tidal stream or creek. Consequently, the coastal zone area that has been proposed for Gloucester County using this criteria is quite expansive, including many areas that are very uncharacteristic to what is usually considered "coastal."

A strict adherence to this criteria results in the apparently inappropriate inclusion into the coastal zone of such unlikely sites as the Gloucester County Court House in Woodbury, the regional-scale Deptford Mall in Deptford Township, all of the rapidly developing Pureland Industrial Park in Logan Township, part of Mid-Atlantic Industrial Park in West Deptford Township, and vast amounts of active farmland in East Greenwich Township. It would also include portions of the inland municipalities of Wenonah Borough and Mantua Township, whose citizens undoubtedly would hardly consider themselves as residing in "coastal areas."

It simply does not appear that coastal related issues are relevant in these areas. While the siting of the above mentioned facilities may in some way affect various environmental resources and should therefore be properly managed, their effect on "coastal" related resources is difficult to recognize. Moreover, it cannot be demonstrated that these facilities owe their existence to any apparent dependence on coastal resources. It therefore seems inappropriate that such areas should be accommodated into a program of coastal zone management.

In addition, implementation of a coastal management program that includes such a vast area of Gloucester County is seen as very difficult to administer. In administering the proposed Coastal Program in Gloucester County, DEP has suggested four alternative management systems of implementation which are:



Comprehensive, Limited with Advisory Role, Limited Without Advisory Role, and No Program. Each management option would address the same uses.

I. Comprehensive - Under this alternative, DEP would identify the coastal zone boundary and policies considered most appropriate for the improvement of water and air quality and the wise use of waterfront areas. Policies would address reuse of existing structures, waterfront access, and concentration of development in urban areas. Most of the policies in the Bay and Ocean Shore Segment document, with appropriate modification, would probably be enforced. The enactment of new legislation would be required, either extending authority similar to that contained in the Coastal Area Facility Review Act (CAFRA) or providing for DEP certification of municipal or county plans and ordinances.

II. Limited With Advisory Role - DEP would define a coastal zone boundary and policies, but would use only existing laws, including the Wetlands Act, riparian laws, and air and water quality standards, to implement the policies. In other areas of the coastal zone that would not require a DEP permit, DEP would work with other state programs and regional agencies to implement policies considered desirable. Municipalities would be asked to seek an advisory opinion from DEP on major development in areas of the coastal zone not directly managed by DEP.

III. Limited Without Advisory Role - Similar to Alternative IV, except that municipalities would not be asked to seek an advisory opinion from DEP on major development in the coastal zone which did not require a DEP permit.

IV. No Program - If the State chooses not to include the Delaware River waterfront as part of its submission of a coastal program for the second segment, existing DEP permit decisions would probably continue to be made on a case-by-case basis.

DEP is presently leaning towards management system Alternative II or III. Both systems represent a different implementation technique than is presently available to DEP in the Bay and Ocean Shore Segment. In the Bay and Ocean Shore Segment, DEP has been legislated direct authority to implement coastal policies through the Coastal Area Facilities Review Act (CAFRA), which enables DEP to approve or deny major developments throughout large portions of the coastal zone. No such CAFRA authority has been legislated to DEP in Gloucester County. In Gloucester County, DEP has only been provided direct authority to implement coastal policies in a limited area through Wetlands and Riparian Laws.

Riparian lands and Wetlands represent merely 5%-10% of the entire area that DEP has preliminarily proposed as a coastal zone in Gloucester County. In the remaining 90% + of this coastal zone, DEP would rely on indirect methods of implementation, such as, as mentioned above, working with other state programs and regional agencies that might have more control in influencing policy decisions considered desirable.

A coastal program that uses these indirect methods for large areas outside DEP permit authority is viewed as unpredictable in its enforcement capabilities. A primary strength of the Coastal Management Program in the Bay and Ocean Shore Segment, where DEP has permit authority over the entire area, is the predictability of its decision making process. The specificity of its policies allows all concerned parties to ascertain in advance whether a DEP permit will be granted or denied for a particular project in a given area. However, with DEP having to rely on outside agencies for enforcement of DEP policies in these large areas where DEP has no permitting authority, this positive "predictability" aspect of the Coastal Program would not exist.

In addition, considering the lack of a legislative directive, these indirect methods are also seen as potentially unnecessarily interfering with directions of growth chosen by local governments, adding a layer of bureaucracy in inland areas where it may not be justified. Including such a large area into a program of coastal management where DEP presently has no direct authority may be interpreted as circumventing legislative action and thereby "back-dooring" increased DEP authority. To date, no known support has been shown in the legislature to bring this area under the direct control of DEP. Moreover, public concern about home rule and governmental over-regulation makes passage of such legislation in the near future highly unlikely.

It is therefore recommended that the coastal zone boundary in Gloucester County be confined to more accurately reflect the area that DEP has been legislated permit authority, specifically wetlands and riparian lands. In these areas, which are generally of greater environmental sensitivity and have a generally greater effect on coastal waters, it is recommended that the administration of wetlands and riparian permitting procedures should be implemented through policies similar to those that are to be used in implementing

the Coastal Program in the Bay and Ocean Shore Segment. Gloucester County is in agreement with the Program's four Basic Coastal Policies, which are

1. Protect the coastal ecosystem
2. Concentrate rather than disperse the pattern of coastal residential, commercial, industrial, and resort development and encourage the preservation of open space,
3. Employ a method for decision-making which allows each coastal location to be evaluated in terms of both the advantages and the disadvantages it offers for development.
4. Protect the health, safety and welfare of people who reside, work and visit in the coastal zone.

There is also general agreement with the various location, use and resource policies in evaluating proposed development within riparian and wetlands areas, although the cumulative effect of many location decisions using the eight-step Coastal Location Acceptability Method (CLAM) remains difficult to ascertain. Nevertheless, these policies, which would employ clearly defined standards, are seen as improving DEP's decision making process in increasing predictability and adding more specificity to existing riparian and wetlands permit procedures, thereby limiting administrative discretion presently made on a case by case basis.

Although there is general agreement in using the policies of the Bay and Ocean Shore Segment in managing riparian and wetlands areas, the following revisions and clarifications might be necessary to better suit the industrialized Delaware River area.

Most of the Special Water Areas policies of CLAM are irrelevant to Gloucester County's Delaware River Coastal Area, with the exception of Finfish Migratory Pathways and Navigational Channels, which are agreeable. The policy of encouraging maintenance dredging of existing navigational channels is supported as well as measures required to mitigate the effects of shoreline erosion caused by dredging. Areas along the County's Delaware Riverfront have a long history of shoreline erosion that has directly resulted from maintenance dredging of the Delaware River Channel. Accordingly, CLAM's water areas policy of retaining structures being generally "discouraged" should be changed

to "conditionally acceptable" for developed areas where their being built may be very important to the stability of an area's developed shoreline.

The location policies of lower waters edge and retained waters edge are interpreted as being compatible with the industrialized Riverfront area since its policies do not necessarily prohibit development if it requires water access as a basic function of its activity. At the same time, since most waters edge and retained waters edge areas are environmentally sensitive wetlands and riparian lands, its policies recommending the minimization of environmental degradation are agreeable.

The use policy of resort/recreation uses having priority over all other uses may be suitable for the Bay and Ocean Shore Segment, where the tourism industry is so important, a more balanced policy between resort/recreation and other uses would be better suited to the industrialized Delaware Riverfront area. While the County's Riverfront has traditionally been developed for industrial uses, there have been, in fact, indications in recent years of attempts to balance these uses with recreational uses. As mentioned previously in this report, the County has proposed the expansion of Red Bank Battlefield in National Park and a wildlife sanctuary in the Cedar Swamp Area. In addition, Riverfront municipalities have proposed access - recreational uses along the River.

In terms of resource policies, the single set of standards developed for buffer areas of industrial development sites is much too generalized, particularly considering the wide range of siting requirements of various types of industrial development. Moreover, the establishment of such standards are more clearly the function of a local ordinance than a statewide policy document.

While it is recommended that the coastal zone consist exclusively of areas of DEP's direct authority, i.e. designated wetlands and riparian lands, in areas outside its direct authority, it is suggested that advice may be offered by DEP to aid municipalities in making important developmental decisions. This could be carried out through a process of notices of hearings on applications for development submitted by the local planning board to DEP, with DEP subsequently making a recommendation to the municipality on the proposed development. In this regard, DEP might, in some cases, provide an invaluable service to a municipality facing a particular developmental pressure. No coastal zone boundary, however,

should be drawn beyond DEP's present direct authority, and final developmental decisions beyond DEP's authority should remain solely with the municipality.

### CHAPTER III

#### State-Local Coastal Policy Consistency

This chapter summarizes local master plans and zoning ordinances of municipalities that are located within the preliminary coastal zone boundary proposed by DEP. Areas of agreement and conflict with proposed DEP coastal policies are discussed and recommendations are made to resolve these conflicts.

## STATE-LOCAL COASTAL POLICY CONSISTENCY

### Summary of Municipal Master Plans and Developmental Ordinances

Initially, an inventory was prepared of the master plans and developmental ordinances that presently exist in the thirteen municipalities that are at least partially included in the coastal zone proposed by DEP. It was important to determine the present status of each ordinance due to the many revisions currently taking place in various municipalities, as required by the Municipal Land Use Law enacted in 1976 (See Table 5 ).

Revisions notwithstanding, a detailed legal inventory was prepared of these ordinances in order to gain a better understanding of the developmental directions chosen by the County's municipal governments with land in the proposed coastal zone. From this inventory, areas of agreement, conflict and confusion with each other and with DEP-OCZM coastal policies, as presented on the Bay and Ocean Shore Sement document, are identified. Special attention has been given to zoning and land use plan districts that have been designated within wetlands areas, since these are areas of DEP's direct authority and are generally seen as being more highly sensitive than other areas within the proposed coastal zone.

The following briefly describes relevant aspects of the developmental ordinances for each of the thirteen municipalities with land located within the proposed coastal zone. The chart on the pages that follow provides a much more detailed inventory of these ordinances.

#### Deptford Township

Large areas in the eastern and northern parts of the Township along the Big Timber Creek, Ladds Branch, and Almonesson Creek have been proposed for inclusion into the coastal zone. This area includes several landfills, a mix of residential uses, the regional-scale Deptford Mall, and various commercial and light industrial uses. This area also includes vacant fields, wetlands, and flood plains.

Accordingly, Deptford's zoning map and master plan, which are virtually synonymous, reflect these uses. There are several tracts within the proposed coastal zone that are zoned for limited industrial uses, i.e., offices, warehouses, etc. as well as a few tracts within the proposed coastal zone that are zoned for various

STATUS OF MUNICIPAL DEVELOPMENTAL ORDINANCES  
WITHIN THE PROPOSED COASTAL ZONE

MUNICIPALITY	MASTER PLAN	ZONING	SUBDIVISION	SITE PLAN	APPROXIMATE % OF AREA WITHIN THE PROPOSED COASTAL ZONE
Deptford	Amended Jan. 1977	Amended April 1978	Amended Jan. 1977	Amended Jan. 1977	30%
E. Greenwich	New plan presently in preparation	New Ordinance pre- sently in prepara- tion	New ordinance presently in pre- paration	--	60%
Greenwich	1968 (presently under revision)	Presently under revision	Adopted Dec. 1977	--	100%
Logan	1973	Readopted and amended Jan. 1978	Readopted and amended Jan. 1978	Readopted and amended Jan. 1978	90%
Mantua	1973	Readopted and amended Jan. 1977	Readopted and amended Jan. 1977	Readopted and amended Jan. 1977	10%
National Park	--	Readopted and amended Jan. 1977	--	--	40%
Paulsboro	In preparation	Readopted Jan. 1977	--	--	20%
Swedesboro	1973	Amended Aug. 1977	Adopted March 1970	--	5%
Wenonah	Adopted Nov. 1977	New ordinance in preparation	New ordinance in preparation	New ordinance in preparation	5%
West Deptford	Revised Oct. 1977	Revisions in preparation	Revisions in preparation	Revisions in preparation	85%
Westville	Adopted April 1978	Amended 1965	--	--	10%
Woodbury	Adopted Jan. 1978	Revisions in preparation	Revisions in preparation	Revisions in prepa- ration	10%
Woolwich	Amended March 1978	Amended Jan. 1977	Amended Jan. 1977	Adopted May 1978	30%



commercial uses. Remaining areas are zoned primarily for low density residential development. While the ordinance includes a clustering provision, it is not permitted in any areas within the proposed coastal zone. A flood plain provision is included within areas of the coastal zone, including areas of state designated wetlands, restricting development on flood prone areas as defined by the Township Master Plan and the Soil Conservation Services Soil Survey.

#### East Greenwich Township

Approximately 60% of the Township has been proposed for inclusion into the coastal zone. This area consists of primarily farmland, low density residential areas, open fields, and flood plain areas. There are two very large tracts within the proposed coastal zone along the western and northern borders of the Township in the vicinity of I-295 that have been designated industrial on the proposed Township Master Plan and zoning map. Permitted uses include food and associated industries, the fabrication of metal products, the manufacturing of light machinery, and office buildings. The remainder of the Township is zoned primarily for agriculture and low density residential development. It should be noted, however, that the revision of all the Township's developmental ordinances is presently in preparation.

#### Greenwich Township

Greenwich Township is located along the proposed Delaware River entirely within the coastal zone proposed by DEP. More than one-half of the Township's Delaware Riverfront area is consumed by DuPont and the Mobil Refinery. Accordingly, these areas have been zoned for heavy manufacturing and have been designated as industrial on the Township's revised land use plan. Virtually all of Greenwich Township from the Delaware River to the Penns Grove Branch of Conrail is zoned for heavy manufacturing, which permits any lawful purpose that is not noxious or hazardous. However, other than the DuPont Plant and the Mobil Refinery, almost all undeveloped areas in the vicinity of the River have been designated for "conservation and public and semi-public use" on the land use plan. Much of the area consists of wetlands, swamps and marshes.

Commercial and medium residential zones are found in the community of Gibbstown, located in the center of Greenwich Township. Lower residential density

zones, are found south of Gibbstown between Nehaunsey Branch and I-295. Planned Limited Industrial (P-L) zones, which permit such uses as industrial research, office buildings, and warehouses, are found still farther south, from I-295 to the Township's southern border. All but the Township's commercial zones can be found within State designated wetlands. Revisions to the Township's zoning ordinance are currently in preparation.

#### Logan Township

All but a very small area of Logan Township is included within the proposed coastal zone, although it is mostly within this small excluded area of the Township that Beckett New Town, as well as a smaller PUD (Eagle Farms) is presently developing. Within the coastal zone area of the Township, a major industrial park (Pureland) is in its initial stages, with 55 acres of a total area of 3000 acres presently developed.

There is a heavy emphasis placed on industrial zoning in Logan Township, with approximately 8300 acres of the Township zoned for industrial uses. Virtually all of Logan Township from the Delaware River south to NJ Route 130 has been zoned Riverfront Industrial (RFI), permitting such uses as electricity or illuminating gas production plants, chemical manufacture, shipbuilding and ship repair yards, oil and gas storage, and oil refining. A few areas within this RFI zone, however, including state designated wetlands areas, have been designated "recreation and environmental protection areas" on the Township's future land use plan. As noted above, the Township provides a planned unit development ordinance, which permits the clustering of various types of residential development.

#### Mantua Township

Areas in the northern part of the Township in the vicinity of Mantua Creek and Edwards Run are included in the proposed coastal zone. These areas have been zoned primarily for various residential zones, with a small segment along Route 45 zoned for highway commercial. Clustering of single-family detached residential development is permitted within the residential zones. In addition, a flood plain provision is included within these zones, restricting development in flood prone areas as defined by the Master Plan and Soil Conservation Service's Soil Survey. State designated wetlands are included within these areas.

### National Park Borough

The proposed coastal zone in National Park consists of a narrow strip of land along the Delaware River and a large vacant tract along Woodbury Creek, part of which is within state designated wetlands. This large vacant tract has been zoned by National Park for light industry. Allowable uses under this category include warehousing operations, light metal processing, and the manufacture of musical instruments, toys, electronics, and appliances. Part of this tract nearest Woodbury Creek has been designated by DEP as wetlands areas.

### Paulsboro Borough

A small area along the Delaware River and a larger area along Mantua Creek are included within the proposed coastal zone in Paulsboro. Most of this area has been zoned "manufacturing" (M) by the Borough, permitting any use that does not "create a noxious, offensive, or hazardous condition beyond a manufacturing district boundary line." It is within this zone that extensive industrial development, primarily petro-chemical terminal and related facilities, are located. The Borough's development plans and ordinances are presently in the process of revision.

### Swedesboro Borough

The coastal zone has been proposed by DEP along Raccoon Creek in the northern part of the Borough. A large tract within this area has been zoned light manufacturing, which is where the Del Monte food processing plant is located. Other areas along Raccoon Creek that are in the proposed coastal zone are zoned for residential uses. The Swedesboro Master Plan, on the other hand, designates all areas immediately adjoining Raccoon Creek as "environmental protection areas." State designated wetlands are included within these environmental protection areas.

### Wenonah Borough

Only a small area in the northwestern part of the Borough has been proposed by DEP for inclusion into the coastal zone. This area has been acquired by the Borough for preservation and recreational purposes and is designated "conservation and/or recreation" on the Borough's recently adopted Master plan. Other new

developmental ordinances in the Borough are presently in preparation in accordance with the Municipal Land Use Law.

#### West Deptford Township

Located along the Delaware River, most of West Deptford Township is included within the coastal zone proposed by DEP. Industrial uses, particularly petroleum and petro-chemical related facilities, are predominant within this zone. Among the major industrial facilities are Mid-Atlantic Industrial Park, Shell Chemical and the Texaco Refinery, as well as a 600 acre tract along the Delaware River that Tenneco had proposed for the site of a major Liquefied Natural Gas (LNG) terminal facility. Various commercial and residential uses are also included within this zone, as well as areas of open fields, farms, wetlands, and marshes.

Zoning in West Deptford Township reflects the various industrial uses that are located in this area. The Township has zoned large tracts of land along the Delaware River and Mantua Creek, totalling approximately 400 acres, for "heavy manufacturing" (M2), permitting "any lawful purpose which does not constitute a hazard to the health of abutting neighbors." Another large tract in the approximate center of the Township, where Mid-Atlantic Industrial Park has located, is zoned "light manufacturing" (M1), permitting such uses as wholesale businesses and storage and warehouse operations. The Township's Land Use Plan also designates large tracts along the Delaware River and Mantua Creek for heavy industrial use. There are also other areas, however, that the Plan has designated for "conservation, recreation, drainage, and other open space." State designated wetlands are included within these areas.

#### Westville Borough

A small area of the Borough along the Delaware River and another small area along Big Timber Creek have been proposed as part of the coastal zone. The Borough's Delaware Riverfront area is zoned for light industry, which permits such uses as warehousing, metal stamping, and the manufacture of clothing, appliances, jewelry and musical instruments. An area along Big Timber Creek has been zoned for parks and recreation areas, and includes state designated wetlands.

### Woodbury

The coastal zone in Woodbury has been proposed by DEP for an area on both sides of Woodbury Creek (up to Red Bank Avenue on one side and Delaware St. on the other) upstream to N. Broad St. This zone includes active and passive recreation areas owned by the City near the Creek, but also includes other areas of various professional, business, and commercial uses, as well as Woodbury High School and the Gloucester County Court House. Accordingly, the City's revised land use plan element designates the area immediately adjoining Woodbury Creek as "park and recreational," while the area including Woodbury High School and the Gloucester County Court House have been designated "governmental, educational, and civic." State designated wetlands are found within both land use districts. Revision of the City's zoning ordinances is presently in preparation.

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### Woolwich Township

Large areas along Raccoon, Little Timber, and Purgey Creeks in the northern part of the Township and along Oldmans Creek in the western part of the Township have been proposed by DEP for inclusion into the coastal zone. This area is primarily rural at present, but part of this area has been proposed for the development of Beckett New Town, which, upon completion, is expected to include approximately 10,000 housing units, as well as a mix of commercial and industrial uses.

The development of Beckett will be guided by the Township's PUD ordinance, which provides that residential uses will be clustered and that surrounding open space areas will be preserved. A flood plain ordinance is also provided, protecting flood prone areas within the Township, including state designated wetlands. In addition, the Township's Future Land Use Plan designates the stream corridors of Oldmans and Raccoon Creeks as "environmental protection areas."

TABLE 6

## MUNICIPAL LEGAL INVENTORY

## DEPTFORD TOWNSHIP

ZONING DISTRICTS WITHIN COASTAL ZONE	EXAMPLES OF PERMITTED USES	SPECIAL PROVISIONS OR ZONES	LAND USE PLAN DISTRICTS WITHIN COASTAL ZONE
R-1: Medium Density Single Family Residence	1-detached dwelling units 2-public playgrounds, con- servation areas, parks and public purpose uses 3-public and private schools 4-churches and cemeteries 5-golf courses	Planned Residential Neighborhoods Planned Unit Communities Planned Residential Communities Flood plain areas* Cluster Development	R-1: Medium Density Single Family Residence R-2: High Density Single Family Residence* A-R: Agricultural and Low Density Residence* I-2: Limited Industrial* I-3: Planned Industrial* SC: Shopping Center Commercial HC: Highway Commercial NC: Neighborhood Commercial APT: Apartment Multiple Family Residential* Planned Residential Communities in A-R District
R-2: High Density Single Family Residence*	1-professional office buildings 2-other uses as in R-1		
A-R: Agricultural and Low Density Residence*	1-farms 2-other uses as in R-2		
I-2: Limited Industrial*	1-offices 2-industrial plants of a type which carry on processes within completely enclosed buildings 3-wholesale distribution centers and warehouses		

\*Districts within wetlands areas

ZONING DISTRICTS WITHIN COASTAL ZONE	EXAMPLES OF PERMITTED USES	SPECIAL PROVISIONS OR ZONES	LAND USE PLAN DISTRICTS WITHIN COASTAL ZONE
I-3: Planned Industrial*	<p>1-industrial parks on tracts of land at least 25 acres in area comprised of the uses described in I-2</p> <p>2-other uses as in I-2</p>		
SC: Shopping Center Commercial*	<p>1-retail sales of goods and services</p> <p>2-restaurants</p> <p>3-banks, including drive-in facilities</p> <p>4-offices and office buildings</p> <p>5-theaters</p> <p>6-hotels and motels</p> <p>7-service stations</p> <p>8-shopping centers comprised of preceeding uses</p>		
HC: Highway Commercial	<p>1-department stores</p> <p>2-garden centers engaged in the retail sales of living plant materials and swimming pool sales</p> <p>3-automobile sales through franchised new car dealers</p> <p>4-car washes</p> <p>5-service stations</p> <p>6-other uses as in SC</p>		

\*Districts within wetlands areas

EAST GREENWICH TOWNSHIP

ZONING DISTRICTS WITHIN COASTAL ZONE	EXAMPLES OF PERMITTED USES	SPECIAL PROVISIONS OR ZONES	LAND USE PLAN DISTRICTS WITHIN COASTAL ZONE
R-15: One Family Residential*	1-one family dwellings 2-municipal buildings, parks, playgrounds or other municipi- pal facilities (including public schools) 3-churches, synagogues, and other similar places of worship	"	R-15: One Family Residential*  A-2: Agricultural Commercial* Industrial*
A-2: Agricultural*	1-customary agricultural uses 2-other uses (same as above)		
B-1: Commercial	1-retail stores 2-banks, fiduciary institutions, banks and professional offices 3-service uses 4-transportation terminal facilities 5-municipal facilities		
I-C: Industrial Commercial	1-professional and business offices 2-all permitted uses in the Industrial Zone		
B-2: Commercial	1-retail shopping center		
M-I: Industrial*	1-food and associated industries 2-light manufacturing 3-farms 4-administrative and building offices 5-public utility installation		

\*Districts within wetlands areas



GREENWICH TOWNSHIP

ZONING DISTRICTS WITHIN COASTAL ZONE	EXAMPLES OF PERMITTED USES	SPECIAL PROVISIONS OR ZONES	LAND USE PLAN DISTRICTS WITHIN COASTAL ZONE
R-1: Residence*(large lot area)	The following examples apply to all residential districts		R-1: Rural Residential*
R-2: Residence*(med. lot area)	1-single family detached dwellings		R-2: Suburban Residential
R-2A: Residence*(small lot area)	2-agricultural uses		R-3: Residential Commercial*
	3-public or parochial schools, churches, hospitals, municipal buildings, public parks, playgrounds or non-commercial recreational uses.		Special Commercial-Industrial
	4-utility uses including railway or bus passenger stations		Industrial*
			Public & Semi-Public*
			Conservation*
C-1: Commercial	1-any use in R-3 districts		
	2-apartments for one family in combination with permitted business use		
	3-retail stores		
	4-restaurants		
	5-professional office buildings		
	6-business offices		
C-2: Commercial*	1-any use permitted in C-1		
	2-hotels, motels		
	3-service stations		
	4-shopping centers		
	5-places of amusement, recreation or assembly		

\*Districts within wetlands areas

ZONING DISTRICTS WITHIN COASTAL ZONE	EXAMPLES OF PERMITTED USES	SPECIAL PROVISIONS OR ZONES	LAND USE PLAN DISTRICTS WITHIN COASTAL ZONE
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M-1: Light Manufacturing\*

1-any use permitted in C-Districts

2-wholesale businesses

3-warehouses or yards for the sale and distribution of ice, coal, petroleum products, building materials or products, manufacturing

4-manufacturing or processing of clothing, electrical equipment, food products, leather products, metal finishing, stamping, rubber products, etc.

5-laboratories

M-2: Heavy Manufacturing\*

1-any lawful purpose provided that no use which is noxious or hazardous shall be permitted

P-L: Planned Limited Industrial

1-scientific or industrial research

2-central office buildings

3-light non-nuisance manufacturing

4-distribution center, highway or interchange service areas

\*Districts within wetlands areas

MANTUA TOWNSHIP

ZONING DISTRICTS WITHIN COASTAL ZONE	EXAMPLES OF PERMITTED USES	SPECIAL PROVISIONS OR ZONES	LAND USE PLAN DISTRICTS WITHIN COASTAL ZONE
R-L0: Low Density Single* Family Residential	1-detached dwelling units 2-public playgrounds, conservation areas and parks 3-public schools and school ad- ministrative buildings 4-churches 5-golf courses 6-public utilities, special exception 7-rest homes, special exception 8-cluster single family developments	Preservation of flood plains*  Clustering	R-L0: Low Density Single Family Residential  R-Med: Medium Density Single Family Residential*  R-HI: High Density Single Family Residential*
R-HI: High Density Single Family Residential	1-detached dwelling units 2-public playgrounds, conservation areas, parks 3-churches		
H-C: Highway Commercial	1-retail sales of goods-services 2-restaurants, bars, taverns, nightclubs 3-department stores 4-garden centers 5-banks 6-office buildings and offices 7-theaters and bowling alleys 8-automobile sales		

\*Districts within wetlands areas

LOGAN TOWNSHIP

ZONING DISTRICTS WITHIN COASTAL ZONE	EXAMPLES OF PERMITTED USES	SPECIAL PROVISIONS OR ZONES	LAND USE PLAN DISTRICTS WITHIN COASTAL ZONE
R: Residence*	1-single family detached* 2-farm houses and farm tenant dwellings 3-customary agricultural uses 4-churches 5-schools 6-customary home occupations 7-professional office or studio 8-public buildings 9-golf courses 10-public utility installations not involving storage yard or commercial offices	Planned Unit Development*	Low Density Residence* Medium Density Residence Medium High Density Residence Medium High Density Residence and Mobile Home Parks Village Residence Highway Commerce Neighborhood Commerce Community Shopping Center Light Industry* General Industry* Riverfront Industry*
B: Business	1-single family detached dwellings 2-customary agricultural uses 3-retail business or service activities 4-public and commercial garages 5-terminal warehousing, wholesale storage and truck depots		Recreation* Cedar Swamp Watershed* Environmental Protection Area*

\*Districts within wetlands areas

ZONING DISTRICTS WITHIN COASTAL ZONE	EXAMPLES OF PERMITTED USES	SPECIAL PROVISIONS OR ZONES	LAND USE PLAN DISTRICTS WITHIN COASTAL ZONE
M-L: Manufacturing-Light*	<ul style="list-style-type: none"> <li>1-all uses in B Zone</li> <li>2-manufactured light machinery, fabrication of metal, paper and wood products, food industries, office buildings, laboratories, radio and TV broadcasting towers and accessory equipment, public utility station, storage of fuel except natural gas</li> <li>3-customary agricultural uses</li> <li>4-aircraft facilities</li> </ul>		
M-H: Manufacturing-Heavy*	<ul style="list-style-type: none"> <li>1-all uses in M-L Zone</li> <li>2-body and collision repairs</li> <li>3-single family detached dwellings</li> <li>4-customary agricultural uses</li> <li>5-freight terminal, chemical manufacture not involving noxious odors or fire-explosive dangers, concrete mixing plants, electricity or illuminating gas plants, food products, machinery, storage of natural or illuminating gas, oil storage, oil refinery, fertilizer manufacturers, ore smelting</li> </ul>		
RF-I: Riverfront Industrial*	<ul style="list-style-type: none"> <li>1-all uses in M-H Zone excepting single family detached dwellings and customary agricultural uses</li> <li>2-boat marinas</li> </ul>		

\*Districts within wetlands areas

# NATIONAL PARK

ZONING DISTRICTS WITHIN COASTAL ZONE	EXAMPLES OF PERMITTED USES	SPECIAL PROVISIONS OR ZONES	LAND USE PLAN DISTRICTS WITHIN COASTAL ZONE
R-1: Residential	1-single family detached dwelling 2-two family dwelling on con- version only 3-public or parochial schools 4-religious use, hospitals 5-municipal building and use 6-noncommercial park, play- ground or recreational 7-passenger station, railway or bus 8-telephone central office, utility line, electric sub- station		
LI-1: Light Industrial*	1-public utilities-installations 2-manufacture of appliances, musical instruments, electronic devices, etc. 3-laboratories 4-carpet rug cleaning, laundries 5-wholesaling and distributing outlets 6-light metal processing 7-job printing, newspaper or book publishing 8-baking and food processing 9-warehouses, commercial greenhouses		

\*Districts within wetlands areas

PAULSBORO

LAND USE PLAN DISTRICTS  
WITHIN COASTAL ZONE

SPECIAL PROVISIONS  
OR ZONES

EXAMPLES OF  
PERMITTED USES

ZONING DISTRICTS WITHIN  
COASTAL ZONE

R-1: Residence	1-single family detached dwelling 2-public or private schools, hospitals, churches 3-public park, playground 4-utility uses, including railway or bus passenger station 5-two family or multiple dwelling on conversion only	
C-1: Commercial	1-apartments in combination with business use 2-hotel or boarding houses 3-retail stores and greenhouses 4-restaurant 5-theater or other place of amusement 6-automobile sales agency 7-parking lots	
C-2: Commercial	1-any use in C-1 districts 2-wholesale business 3-warehouses or storage yards 4-limited manufacture 5-laboratories	
M: Manufacturing*	1-any lawful purpose, provided that no use shall create a noxious, offensive or hazardous condition beyond a manufacturing district boundary line shall be permitted	

\*Districts within wetlands areas

SWEDESBORO

ZONING DISTRICTS WITHIN COASTAL ZONE	EXAMPLES OF PERMITTED USES	SPECIAL PROVISIONS OR ZONES	LAND USE PLAN DISTRICTS WITHIN COASTAL ZONE
R-2: Residence*	1-two family detached dwelling 2-single family or two-family semi-detached dwelling unit 3-multiple dwelling		Medium Density Residence and Supporting Services Environmental Protection Area Light Industry and Sup- porting Services*
L-M: Light Manufacturing*	1-wholesale business establish- ment 2-warehouse or yard for storage, sale and distribution of ice, coal, petroleum products, , building materials, or pro- ducts of manufacturing uses 3-manufacturing or processing of non-alcoholic beverages, canvas products, clothing, food contain- ers, electrical equipment, jewel- ery and clocks, leather products medical equipment, wood products rubber products 4-laundry 5-laboratory 6-trucking terminal		Townhouses, Garden Apart- ments, Offices and Sup- porting Services Limited Industry and Sup- portive Services

\*Districts within wetlands areas



WENONAH

ZONING DISTRICTS WITHIN COASTAL ZONE	EXAMPLES OF PERMITTED USES	SPECIAL PROVISIONS OR ZONES	LAND USE PLAN DISTRICTS WITHIN COASTAL ZONE
R-1: Residential	1-single family detached dwelling 2-publicly owned park, playground, or recreational area 3-municipal building or use 4-two-family dwelling on conversion only		R-1: Residence*  Conservation and/ or Recreation*

\*Districts within wetlands areas

# WEST DEPTFORD TOWNSHIP

ZONING DISTRICTS WITHIN COASTAL ZONE	EXAMPLES OF PERMITTED USES	SPECIAL PROVISIONS OR ZONES	LAND USE PLAN DISTRICTS WITHIN COASTAL ZONE
R-1: Rural Residence*	1-single family detached dwelling		Short Term Growth, Resi- dential Regions
R-2: Suburban Residence*	2-agricultural or farm use		Future Growth Residential Regions*
R-3: Residence*	3-public or parochial school, churches, hospital, municipal building or use, public park, playgrounds		Other Open Space*(con- servation areas)
	4-utility uses		Developed Residential*
	5-cemetery		Light and Medium Manufacturing*
	6-clubs or lodge not operated as a business		Heavy Manufacturing Commercial*

C: General Commerical*	1-any use permitted in "R" residen- tial districts	
	2-dwelling for one family in con- nection with business use	
	3-hotel, boarding house	
	4-retail stores and services	
	5-public garage, service station and automobile sales	

NC: Neighborhood Commercial	1-any use permitted in "R" Districts	
	2-retail food stores	
	3-drugstore	
	4-personal services	
	5-professional offices	
	6-restaurants	

\*Districts within wetlands areas

ZONING DISTRICTS WITHIN COASTAL ZONE	EXAMPLES OF PERMITTED USES	SPECIAL PROVISIONS OR ZONES	LAND USE PLAN DISTRICTS WITHIN COASTAL ZONE
M-1: Light Manufacturing	<p>1-any use permitted in "C" districts</p> <p>2-wholesale businesses</p> <p>3-storage or warehouses</p> <p>4-storage yards</p> <p>5-manufacturing or processing of non-alcoholic beverages, clothes, medical and drafting equipment, etc.</p>		
M-2: Heavy Manufacturing	<p>1-any lawful purpose which does not constitute a hazard to the health of abutting neighbors</p>		
SC: Shopping Center	<p>1-any of the uses permitted in the "C" districts</p>		

\*Districts within wetlands areas

WESTVILLE

ZONING DISTRICTS WITHIN COASTAL ZONE	EXAMPLES OF PERMITTED USES	SPECIAL PROVISIONS OR ZONES	LAND USE PLAN DISTRICTS WITHIN COASTAL ZONE
R-1: Residential*	1-single family detached dwelling 2-churches 3-professional offices 4-customary home occupations		
P-2: Parks and Conservation*	1-parks, playgrounds		
C-3: Commercial	1-any use permitted in "R" district 2-single apartment in combina- with business use 3-hotel, motel, boarding house 4-retail store 5-restaurants 6-professional or business office, agency or studio 7-club or lodge 8-bank 9-personal service shops		
I-4: Light Industrial*	1-any use permitted in "R" and "C" 2-wholesale businesses 3-warehouse and frozen food locker 4-manufacture of beverages, dairy products, clothing, jewelry, pro- fessional equipment, novelty products and electrical appliances		

\* Districts within wetlands areas

WOODBURY

ZONING DISTRICTS WITHIN COASTAL ZONE	EXAMPLES OF PERMITTED USES	SPECIAL PROVISIONS OR ZONES	LAND USE PLAN DISTRICTS WITHIN COASTAL ZONE
R:60: Residential*	1-single family detached dwelling 2-two family or multiple dwelling on conversion only 3-public or parochial school 4-churches 5-public park or playground 6-passenger station, railway or bus 7-open air parking lot	Planned Apartment or Commercial Districts	Residential* (1 to 6 families per acre) Governmental, Educational and Civic* Commercial Park and Recreational*
R-35: Residence	1-any use permitted in R-60 districts 2-single family semi-detached dwelling with a party wall		
R-15: Residence	1-any use permitted in "R-35" 2-two family detached dwelling 3-two family semi-detached 4-educational or office use by government agency 5-open-air motor vehicle parking lot		

\*Districts within wetlands areas

ZONING DISTRICTS WITHIN COASTAL ZONE	EXAMPLES OF PERMITTED USES	SPECIAL PROVISIONS OR ZONES		LAND USE PLAN DISTRICTS WITHIN COASTAL ZONE
C-1: Commercial	1-any use permitted in "R-15"			
	2-club or lodge			
	3-three family apartment dwell- ing in conjunction with with business use of the building			
	4-hotel or boarding house			
	5-retail store			
	6-personal service shop			
	7-restaurant			
M-H: Medical-Hospital	1-any use permitted in "R-35"			
	2-hospital			
	3-medical laboratories			
	4-nursing homes			
	5-facilities for educating and training hospital personnel			
	6-residences for nurses, interns and doctors associated with hospital			

\*Districts within wetlands areas

WOOLWICH TOWNSHIP

ZONING DISTRICTS WITHIN COASTAL ZONE	EXAMPLES OF PERMITTED USES	SPECIAL PROVISIONS OR ZONES	LAND USE PLAN DISTRICTS WITHIN COASTAL ZONE
R-1: Residential	1-single family detached dwelling 2-farm houses and buildings 3-church and associated buildings 4-schools with parks and play-grounds 5-customary home occupations with special exception	Cluster Development Planned Industrial Development Regional Shopping Center Flood Plain Controls	Environmental Protection Area* Low Density Residential Medium Density Residential Parks and Community Facilities Medium-High Density Residential Major Commercial Center Light Industry* Office and Research
RLD: Residential Low Density	1-single family detached dwelling 2-farm houses and buildings 3-agriculture and horticulture 4-keeping of horses and stables 5-public and private educational, religious and recreation facilities 6-social services and organizations 7-township facilities (fire and police)		
RMD: Residential Medium Density	1-any use permitted in "RLD" 2-single family semi-detached and two family dwellings		

\*Districts within wetlands areas

ZONING DISTRICTS WITHIN COASTAL ZONE	EXAMPLES OF PERMITTED USES	SPECIAL PROVISIONS OR ZONES	LAND USE PLAN DISTRICTS WITHIN COASTAL ZONE
C: Commercial	1-any use permitted in R-1 and R-2 2-hotel, motel and boarding houses 3-retail store 4-personal services		
M: Manufacturing	1-all uses permitted in "C" Zone 2-any manufacturing, processing or industrial use provided the pro- posed industrial process meets performance requirements and has no inherent characteristics which are noxious, injurious, offensive or hazardous		
L10: Light Industrial Office	1-farm houses and buildings, agricultural 2-light manufacturing 3-office buildings 4-laboratories		

\*Districts within wetlands areas



### Conclusions and Recommendations

Generally speaking, it can be said that the local plans and ordinances of the coastal municipalities directly fronting on the Delaware River are consistent with each other in their strong advocacy of industrial development along the Delaware River. These riverfront municipalities, particularly the larger Townships, have zoned much of the County's Delaware River area for various types of heavy industry. Logan Township, for example, has zoned 8300 acres for heavy industrial use, Greenwich Township 3000 acres, and West Deptford Township 4800 acres, accounting for approximately one-half of the total area in each of these municipalities. Virtually all of Logan Township from the Delaware River to Route 130 has been zoned "Riverfront Industrial" (RFI), which permits such uses as chemical manufacture, ship building and repair yards, oil storage, and oil refining, while much of the riverfront areas of both West Deptford and Greenwich Townships have been zoned "Heavy Manufacturing" (M2). Accordingly, it is within these zones that many heavy industrial facilities are located, such as the Texaco Refinery and Shell Chemical in West Deptford Township, the Mobil Refinery and DuPont Plant in Greenwich Township, and Monsanto Chemical in Logan Township, as well as vast amounts of vacant land that are presently owned by industry.

While the zoning ordinances of these Townships appear to reflect a strong desire to almost totally develop the Delaware Riverfront area for industrial purposes, each Township's land use plan appears to recognize a need to preserve at least portions of this area. A few areas within Logan Township's RFI zone have been designated "recreation and environmental protection areas" on its Future Land Use Plan. In Greenwich Township, while DuPont and Mobil consume more than half of the Township's Delaware Riverfront Area, the Land Use Plan designates virtually all remaining undeveloped areas along the River for "conservation and public and semi-public uses." West Deptford Township's revised Land Use Plan Element designates particular tracts in the vicinity of the Delaware River for "conservation, recreation, drainage, and other open space."

Realistically, it is doubtful that this entire Riverfront area, totalling approximately 1700 acres, would ever be fully developed for industrial purposes, nor could it be easily justified from a land use perspective. A rational, more balanced approach of preserving at least some open space within this industrial

area, as reflected in each Township's master plan, would probably better serve the local communities, as well as the overall region. However, it should be noted that a municipality cannot legally zone to designate an area as preservation, open space, etc.

Although there are large areas where municipalities have very broadly zoned for industrial uses, a municipality's goal of preserving environmentally sensitive areas such as wetlands within these zones, as reflected in the municipality's master plan, can still be accomplished through other avenues. One method would be through performance standards, whereby a developer planning to develop an industrial tract containing environmentally sensitive areas would be required to insure no irreparable harm to these lands prior to the issuance of development permits by the municipality. A municipality may also require from a developer deed covenants protecting environmentally sensitive areas within a particular industrial tract proposed for development. A municipality should also be able to expect that authority legislated to DEP such as the Wetlands Law would aid a municipality to protect its environmentally sensitive areas.

Although to a much lesser degree than the Riverfront Townships, the zoning ordinances of the smaller Boroughs along the Delaware River (Paulsboro, National Park, and Westville) also seem to advocate industrial development, and therefore would probably also benefit from the use of performance standards and deed covenants. In Paulsboro, large areas along the Delaware River and Mantua Creek have been zoned "Manufacturing" which is where petro-chemical terminal facilities have developed. National Park has zoned its remaining large vacant tract, which is located along the Delaware River and Woodbury Creek, for "light industry," allowing such uses as warehousing operations and light metal processing. Westville has also zoned its riverfront area for light industry, a zone similar to that of National Park.

Overall, the plans and ordinances of the remaining proposed coastal municipalities, which are located landward from the Delaware Riverfront municipalities, do not reflect the strong inclination toward industrial development that the plans and ordinances of the Riverfront municipalities typically demonstrate. There appear to be no clear inconsistencies among the plans and ordinances of these municipalities, and they therefore can be considered generally consistent with each other.

State coastal policies, as presented in the Coastal Management Program, Bay and Ocean Shore Segment, vary in applicability, depending on the various characteristics of a location and type of use that is proposed. Generally speaking, however, these policies, if taken as a whole, tend to emphasize preservation and recreational uses within the coastal zone, at least to a much greater extent than the ordinances of the Riverfront municipalities. These policies may apply well to large areas of the Bay and Ocean Shore Segment, where the tourist/recreation industry is so important, but their applicability may not be suitable if broadly applied to large areas of Gloucester County where there is an emphasis on industrial development. A use policy that would give priority to resort/recreational uses over all other uses, for example, or a location policy that would discourage the development of SCS defined Prime Agricultural Areas for non farming purposes (both of which are to be applied to the Bay and Ocean Shore Segment) would appear to be in conflict with the plans and ordinances chosen by the local riverfront municipalities.

DEP's coastal policies, therefore, administered on a state level basis, could potentially prohibit a particular type of development in a given area within DEP's proposed coastal zone, where the local municipality may find the development desirable. Primarily responsible for this potential conflict is the large amount of land to which DEP desires to apply its policies as part of its coastal zone, which, as previously mentioned, has been defined as lands up to the first cultural feature i.e., road, railroad, etc. beyond the Delaware River and its tributaries of tidal influence. Utilizing this definition therefore provides for the inclusion of most of the area of the Riverfront Townships and at least part of a total of thirteen Gloucester County municipalities, even though DEP has only been granted direct jurisdiction to administer coastal policies within a small percentage of this proposed coastal zone.

It is therefore recommended, considering the potential conflicts between state and local policies, and also considering DEP's lack of direct jurisdiction within large parts of the proposed coastal zone, that the application of DEP coastal policies be limited to an area that more closely relates to where DEP presently has direct jurisdiction, primarily through riparian and Wetlands Laws. Wetlands and riparian lands are generally better associated with the "coast" and are considered much more environmentally sensitive than other areas within this proposed coastal zone. As shown by legislative actions such as the Wetlands Law, these areas are generally better recognized and accepted

as a state or regional resource that circumvents municipal boundaries. A coastal program in Gloucester County that excludes the large areas outside DEP jurisdiction that DEP has proposed still retains the values of the Program of addressing issues of regional perspective and resources. Moreover, the coastal municipalities generally express a desire to protect these areas, with most municipalities delineating wetlands as preservation areas on local master plans. Consequently, the administration of DEP policies that would protect wetlands are seen as being in agreement with local desires and would strongly aid a community in implementing these desires. On the other hand, the advantages of the administration of policies at the state level in other areas of this proposed coastal zone outside DEP jurisdiction are not evident, particularly where they might conflict with local plans in areas that few people would consider related to "coastal" issues.

In administering a coastal program for this coastal zone limited to wetlands and riparian lands, it is recommended that the program should establish policies that would permit public access, preserve environmentally sensitive areas as defined by Bay and Ocean Shore Segment criteria, and promote recreational activities. At the same time, these policies should be balanced with the recognition that industrial development should not be totally excluded if it can be proven that the facility requires water access as a basic function of its activity and does not result in environmental degradation.

## CHAPTER IV

### County Planning Board as Coastal Clearinghouse

This chapter summarizes experiences of providing information on the Coastal Zone Management Program to public and municipal officials, and local responses to the DEP Coastal Program.

## County Planning Board as Coastal Clearinghouse

Initial efforts of providing information on the Coastal Zone Management Program to the local officials consisted of a letter that was prepared and submitted to the mayor and planning board chairman in each municipality with land within the coastal zone proposed by the Department of Environmental Protection Office of Coastal Zone Management (DEP - OCZM). The letter briefly explained DEP's evolving proposed coastal management program and the County's involvement with the coastal coordination project. In addition, a small map sketching the coastal zone boundary initially proposed by DEP was included with the letter. The letter also solicited comments on the proposed coastal program and boundary from the local officials.

Subsequently, planning board meetings were attended in Logan, Woolwich, and Greenwich Townships to briefly explain the Program and to express the need for obtaining their local input. The program was also discussed by telephone with the planning consultant for Greenwich Township and the City of Woodbury, as well as the consultant for Logan Township, both of whom are presently assisting their respective municipalities in revising their developmental plans and ordinances. Also, in conjunction with the Department of Environmental Protection, Office of Coastal Zone Management (DEP - OCZM) a public meeting was held at Gibbstown Fire Hall in Greenwich Township to discuss the proposed Coastal Program and gather citizen input.

Various comments have been received in response to the information letter and discussions at the planning board meetings and the public meeting. (See appendix) There appears to be common agreement among the municipal responses concerning the geographic extent of the proposed coastal zone. All question the necessity of such an extensive area to implement the coastal program and fear a further erosion of home rule. Letter responses from William A. Ciotti, Chairman of the Greenwich Township Planning Board and from Robert N. Gartside, Chairman of the Woodbury Planning Board, both express concern over the boundary's size and suggest limiting the coastal program to flood plains, wetlands, and riparian lands. Greenwich Township, while stating strong support for environmental protection programs, also expressed concern over the uncertainty of controls that the coastal program could exercise over development, considering the layering and often inconsistency of controls by various agencies involved.

Mayor Dominic Merino emphasized Greenwich Township's strong support of the home rule principle of retaining development decisions at the municipal level, but added that the Township welcomes advice and information that will help them make decisions in the public interest. Similarly, Kenneth DiMuzio, solicitor for Logan and Greenwich Townships, questioned the need for an expanded coastal zone, but thinks the formulation of a policy document that creates parameters within which DEP decision making will occur is a fruitful gesture. Letter responses from Susan Osborn, Secretary of the Woolwich Township Planning Board, and James F. Doerrmann, Clerk of the Woolwich Township Committee, both convey the feelings of opposition to the coastal program expressed by each governing body. Woolwich Mayor Albert Stecher, Jr. stated that he felt that existing laws are adequate if properly enforced and that the boundary should be more realistically drawn so that only coastal areas are addressed. Mayor Robert Reid of West Deptford Township also stated at a Township Committee meeting that he did not think the program was necessary and that the Committee should oppose it. From the private sector, A. Carl Helwig, President of Pureland Industrial Park, expressed concern over unnecessary expanded DEP authority, feeling that DEP is trying to legislate by fiat, avoiding the legislature and local planning boards within whose jurisdiction such controls so significant to the region's economy belong.

It should be pointed out, however, that local comments were not all totally negative concerning the coastal program. As mentioned above, Greenwich Township Mayor Merino stated that the Township would welcome advice from DEP in helping the Township make major development decisions in the public interest. The City of Woodbury Planning Board commended the four basic coastal development policies of the Program and particularly concurred with the position that the "concentrated development" policy does not apply to nuclear generating stations or Liquefied Natural Gas (LNG) facilities. The Woodbury Planning Board also concurred with the procedural principles leading to more objective decisions on proposed uses, and strongly supports the making of such decisions at the lowest level of government consistent with these principles. David Caccia of the Mantua Township Environmental Commission expressed concern that the public will not have access to the River's recreational opportunities. He felt that home rule has done little to preserve public access to the River and that the State should be involved in acquiring public access to the River.

## APPENDIX



RECEIVED  
WOOLWICH TOWNSHIP PLANNING BOARD  
SWEDESBORO, N. J.  
1978 SEP 12 AM 3:47

September 8, 1978

Gloucester County Planning Board  
North Delsea Drive  
Clayton, NJ 08312

Dear Sir:

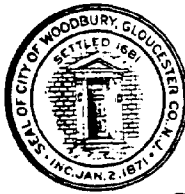
Please be advised that the Woolwich Township Planning Board has reviewed and considered the Costal Zone Management Plan that was presented on September 7, 1978, the regular meeting, by a representative of your Board.

It is the feeling of the Planning Board that it is opposed to the plan as it presently exists and the Board feels that its opinion should be a matter of record with your agency.

Sincerely yours,



Mrs. Susan Osborn  
Secretary



*City of Woodbury*  
GLOUCESTER CO.

WOODBURY, N. J.

September 18, 1978

Mr. Charles E. Romick  
County Coastal Coordinator  
County Planning Department  
Clayton, New Jersey 08312

Dear Mr. Romick:

This is in response to your communication of August 15, 1978 regarding the DEP coastal management program. The Woodbury Planning Board would like to submit the following comments with respect to the program.

1. The Board commends the four basic coastal development policies included in the report. We concur particularly with the position that the "concentrated development" policy does not apply to nuclear generating stations or Liquid Natural Gas facilities.
2. The Board concurs with the procedural principles which will lead to more objective decisions on proposed uses, and strongly support the making of such decision at the lowest level of government, consistent with these principles.
3. The geographical extent of the coastal zone is a matter of concern to the Board, and is considered greater than needed to accomplish the objectives of the Program. A significant portion of the developed area of Woodbury appears to be in the Proposed DEP Coastal Zone, including the County Court House, the High School, Post Office, and various other commercial and residential buildings. A limitation to riparian lands and wet lands as previously defined by DEP would appear to us to be a more feasible approach.

Thank you for providing the opportunity to comment on this proposed Program.

Sincerely yours,

*Robert N. Gartside*

Robert N. Gartside, Chairman  
City Planning Board

cc: Charles Dougherty, Sec'y  
Mayor Bayer

RECEIVED  
COUNTY PLANNING BOARD  
SEP 20 1978  
15

TOWNSHIP OF WOOLWICH  
GLOUCESTER COUNTY, N. J.

1978 SEP 28 AM 5:00

TOWNSHIP CLERK  
JAMES F. DOERRMANN  
RAINEY ROAD  
SWEDESBORO, N. J. 08055

September 18, 1978


Gloucester County Planning Board  
North Delsea Drive  
Clayton, NJ,, 08312

Dear Sir:

Please be advised that the Woolwich Township Committee has reviewed and considered the Costal Zone Management Plan that was presented at the regular meeting on Septmeber 18, 1978.

It is the feeling of the Committee that it is opposed to the plan as it presently exists and the Committee feels that its opinion should be a matter of record with your agency.

Sincerely yours,

  
James F. Doerrmann /s.d.  
Clerk

RECEIVED  
COUNTY OF SOUTHERN NEW JERSEY  
COUNTY PLANNING DEPARTMENT

GREENWICH TOWNSHIP PLANNING BOARD

P. O. BOX 121

GIBBSTOWN, NEW JERSEY 08027

1978 SEP 27 AM 4:56

September 26, 1978

Mr. Charles E. Romick  
County Coastal Coordinator  
County Planning Department  
Clayton, New Jersey 08312

Dear Mr. Romick:

Thank you for meeting with the Greenwich Township Planning Board on September 25 to review DEP's Proposed Coastal Management Program. Based on the Board's understanding of the program, we take exception to two elements:

1. The amount of area proposed to be included in the coastal zone, which would include Greenwich Township in its entirety. We question whether such an extensive area is essential to accomplish the goals of the program, and suggest limiting the areas to flood plains, riparian lands, and officially designated wet lands.
2. The uncertainty over the extent of control and the agency which would exercise control over development within the Township. While Greenwich has been a strong supporter of environmental protection programs, the layering and often the inconsistency of controls by the various agencies involved is a matter of practical concern.

The Board agrees with the basic coastal development policies which are included in the proposed program. As Mayor Merino emphasized at the September 25 meeting, however, Greenwich officials strongly support the home rule principle of retaining development decisions at the municipal level, but will always welcome advice and information which will help us make these decisions in the public interest.

Very truly yours,



William A. Ciotti, Chairman

WAC/c  
cc: Mayor Merino

RECEIVED  
COUNTY CLERK'S OFFICE  
TRENTON, N.J.

1978 DEC 14 AM 7:49

December 11, 1978

Mr. David N. Kinsey, Chief  
Office of Coastal Zone Management  
PO Box 1889  
Trenton, NJ 08625

Dear Sir:

This letter from Woolwich Township is in response to the Coastal Management Plan being considered by the State.

In my opinion, it is aimed at an area that is already overregulated. The laws on the books are quite adequate if properly enforced. If they are not, then possibly they should be amended, instead of creating more red tape, which would only result in more of a financial and bureaucratic burden on the people it is supposedly designed to benefit.

If it is mandated by Federal Law as was stated, then possibly, it could be instituted as advisory legislation. At the very least the boundaries should be more realistically drawn so the coastal areas are addressed and not land that quite obviously is better managed under other State and Local laws. To infer that this land is coastal is a misrepresentation to the people of this State and could result in the waste of this very precious resource, which was certainly not the intent of the enabling legislation.

Therefore, I would conclude, that a good hard look should be taken as to what will be the benefit to the people and the land, if any.

Sincerely yours,

Woolwich Township Committee  
Albert C. Stecher, Jr., Mayor

RECEIVED  
1978 DEC 12 AM 7:48  
ANGELO J. FALCIANI  
A PROFESSIONAL CORPORATION

KENNETH A. DIMUZIO  
A PROFESSIONAL CORPORATION

LOUIS D. FLETCHER

JOSEPH J. HOFFMAN, JR.

LAW OFFICES

35 SOUTH BROAD STREET

P. O. BOX 379

WOODBURY, N.J. 08096

(609) 845-8333

December 11, 1978

OUR FILE NO. \_\_\_\_\_

Department of Environmental Protection  
P. O. Box 1889  
Trenton, New Jersey 08625

Attention: David N. Kinsey, Chief  
Office of Coastal Zone Management

Re: Coastal Management Program -  
Delaware River Region

Dear Mr. Kinsey:

This will acknowledge receipt of your December 5, 1978 letter in reference to the above. I have the following comments in reference to the November 30, 1978 meeting regarding the above:

1. In my opinion there should not be an expansion of DEP authority in the above zone. The existing permit system should suffice to protect the natural resources subject to existing regulation.

2. I have no objection to DEP attempting to formulate a policy document which creates parameters within which DEP decision-making will occur. Furthermore, I think the establishment of a policy document is a fruitful gesture.

3. I believe the current approach, namely the November 30, 1978 meeting format, is unsatisfactory. Without a background document, an attempt to elicit criterion a priori, for a "CAFRA-TYPE" zone is destined to fail. Existing permit systems, to a large extent, are based on scientific data with a supporting rationale (e.g. wetlands photographic system, flood hazard area measurements, etc.). When we leave these areas of objective measurement, however, in an attempt to identify geographically areas "worth saving" we blur the distinctions between objectivity and subjectivity. The blurring of lines is due to epistemological deficiencies. We cannot translate subjective concerns into geographical boundaries because there is no technology competent to draw the lines. Stated differently, we do not have the semantical baggage to carry our concepts beyond the arena subject to objective measurement. No member of the public can say draw the

Department of Environmental Protection  
December 11, 1978  
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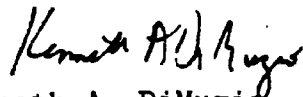
CAFRA line here because on the river side of this line I like the beauty of existing resources. As you know, beauty is in the eye of the beholder. Consequently, summoning responses through a question such as "what do you want for the coast" insures a rhetorical reply. I suggest that better procedure would be to supply a proposed set of policies for decision-making within the above referenced zone for comment.

4. In response to the above I would assume your comment would indicate that you are attempting to elicit information to assist you in developing the set of principles to be used to formulate policy within such a draft document. May I suggest that the data necessary to formulate these principles can be found in municipal master plans and zoning ordinances. To that end, enclosed please find a copy of the Greenwich Township Master Plan which was adopted in 1977. The Logan Township Planning Board is currently reviewing a proposed master plan to be adopted within the next month or two. Upon receipt of the adopted plan, I shall forward a copy to you.

Also enclosed please find a copy of an August 28, 1978 letter to me from Gerald Lenaz, Logan Township Planner. The letter succinctly outlines a factual basis supporting the retention of "home rule" within the above referenced area. As stated earlier, existing state permit systems will suffice to protect those environmentally sensitive areas which have regional implications.

I hope the above comments are constructive and helpful.

Very truly yours,



Kenneth A. DiMuzio

KDM:emj

cc. Greenwich Township  
Logan Township  
Samuel Leone, Esq.  
Mr. Del Tredinnick  
Joseph Georgiana, Esq.  
Logan Township Planning Board  
Greenwich Township Planning Board  
Gloucester County Planning Department  
Mr. A. Carl Helwig  
Mr. Robert F. Bower

1978 DEC 26 11:12:15

LAW OFFICES

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ANGELO J. FALCIANI  
A PROFESSIONAL CORPORATION

KENNETH A. DIMUZIO  
A PROFESSIONAL CORPORATION

LOUIS D. FLETCHER

JOSEPH J. HOFFMAN, JR.

December 21, 1978

OUR FILE NO. \_\_\_\_\_

Department of Environmental Protection  
P. O. Box 1889  
Trenton, New Jersey 08625

Attention: David N. Kinsey, Chief  
Office of Coastal Zone Management

Re: Additional Comments on the  
Coastal Zone Management Process  
Pursuant to 12/21/78 Meeting with  
Gloucester County Economic Development  
Council and Assemblyman Stewart

Dear Mr. Kinsey:

During the above conference you again noted that there were three indispensable factors involved in development of a Coastal Zone Management Program:

1. Boundary line.
2. Set of policies for decision making.
3. Management system for decision making.

You further indicated that in January an "Options Document" will probably be circulated. This document will discuss possible alternatives for a Coastal Zone Management Program. I iterate that such a document should include not only a proposed boundary line but a discussion of the proposed policies which would relate to that boundary line. If the Options Document merely identifies various boundary lines, informed comment from members of the public will not be adequately solicited. Whether a boundary line is a "good idea" can best be judged by the set of policies which suggested formation of that boundary line. To suggest a boundary line in a vacuum will elicit knee-jerk negative or positive reactions without a thoughtful analysis of the factors which make drawing such a boundary line sensible and in the public interest.



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I look forward to receipt of the "Options Document".

Very truly yours,

Kenneth A. DiMuzio

KDM:emj

cc. Greenwich Township  
Logan Township  
Samuel Leone, Esq.  
Mr. Del Tredinnick  
Joseph Georgiana, Esq.  
Logan Township Planning Board  
Greenwich Township Planning Board  
Gloucester County Planning Department  
Mr. Carl Helwig  
Mr. Robert F. Bower  
Mr. Jack Crandall

# **Pureland**

## **INDUSTRIAL COMPLEX**

603 Heron Drive, Bridgeport, New Jersey 08014 • 609/467-2333 • Pennsylvania 215/727-0700

November 29, 1978

Mr. David N. Kinsey  
Office of Coastal Zone Management  
New Jersey Department of Environmental Protection  
P.O. Box 1889  
Trenton, New Jersey 08625

Re: CAFRA Extension to Gloucester County

Subject: Management System Options

Dear Mr. Kinsey:

The Pureland Industrial Complex is a 3,000 acre environmentally controlled Industrial Park located entirely within Logan Township, Gloucester County, New Jersey. As such, we have a very direct interest in any possible extension of CAFRA to Gloucester County.

Pureland was conceived in 1965, land acquisition began in 1969, and in June 1976, when the Logan Township Municipal Utilities Authority Sewage Plant was completed, Pureland matured into what it is today, a major industrial park with 14 buildings and 1000 employees.

The long gestation of Pureland was necessitated by extensive environmental analysis, research and planning. As such, we feel we are competent to comment on the CAFRA extension.

In the September issue of the "Jersey Coast", the DEP listed four possible management systems for the Delaware River Segment. It seems that Systems I and IV are not being given serious consideration and hence, we are not addressing ourselves to those systems.

System II, the Limited Advisory Role, would have DEP defining a coastal boundary, and would use existing laws to implement policies. We wish to make the following comments regarding this system:

1. We feel this is an "end around" the legislature. That is, we feel this system imposes a new set of rules to follow and defines a new coastal zone boundary without legislative approval. We, and our counsel, disagree with the DEP statement, "no new legislature would be necessary".
2. The DEP was awarded a mapping program by the U.S. Department of Housing and Urban Affairs to prepare certain "risk" maps under the U.S. Flood Insurance Act. This work has not been completed and should certainly be completed prior to any attempt

to analyze in an intelligent manner their effect with respect to CAFRA regulations.

3. There is a great deal of redundancy in this. These sensitive areas are protected by:
  - a. Riparian Law
  - b. Stream Encroachment Law
  - c. The Wetlands Law
  - d. The Federal Law Regulating Flood Hazards
  - e. In some instances (such as Pureland) developer imposed preservation areas.

We already know how to deal with the agencies that administer these laws. Another "Super Regulatory Body" is the last one that we need.

System III, limited without advisory role, is also objectional for the same reasons as stated in 2. and 3. in the above paragraph.

On December 1, 1977, I wrote to you concerning CAFRA "Strategy". I would like to incorporate those comments once again here.

1. We feel an economic impact should be a part and parcel of the "Strategy". How many jobs are gained or lost if the "Strategy" is implemented? What is the cost of implementing the "Strategy"? What are the costs of alternatives to the "Strategy"?
2. The proposed "coastal zone" is intended to protect our fragile environment in an area that is highly developed or is now being actively developed do to the proximity of Gloucester County to Philadelphia, Camden and Wilmington. At this time, we feel there exists several programs which in effect create a de facto "coastal zone" without the attendant problems and costs and bureaucratic red tape involved in establishing a coastal zone per the "Strategy", these programs are:
  - a. Stream Encroachment - administered by DEP
  - b. Riparian Law - administered by DEP
  - c. Wetlands Act - administered by DEP
  - d. U.S. Flood Insurance Act - mapping program has been awarded to DEP (Bureau of Flood Plain Management) by the U.S. Department of Housing and Urban Affairs.

If one superimposes all of the above restrictions on ground in Gloucester County, we are certain the resultant map will in effect be a "coastal zone". Since the DEP is currently involved in all those programs, why can't it, through internal reorganization, have one department provide the administration? At the same time a combined map could be provided to meet the requirement of a coastal inventory under CAFRA,

3. The mapping system is poor. National features such as Riparian boundaries, wetlands boundaries or stream encroachment boundaries should be followed not synthetic lines as township lines or roads.
4. No inventory or recognition of local zoning/planning ordinances has taken place. Today the public is sophisticated with regard to the environment and this is brought out by the high caliber of people sitting on local planning and/or zoning boards. Present zoning in effect probably protects a good portion of the proposed "coastal zone".
5. The timetable doesn't allow for a revision to the "Strategy". It seems the DEP is asking for token comments and will not evaluate them thoroughly.

In summary, our opinion on the formation of a coastal zone in general, and in Gloucester County in particular may best be summarized by referring to the "Strategy" and the implementation thereof through the uses of the procedure principles developed by the DEP. The principles and or comments are as follows:

1. Consider only coastal resource and coastal land and water use decisions or greater than local significance.
  - \* The resources and use decisions are already considered through the vehicle of Riparian Law, Stream Encroachment Law, Federal Flood Hazard Law, Wetlands Law and local zoning ordinances.
2. Create mechanisms to insure that decisions on coastal land and water uses are made at the lowest practicable level of government, consistent with these guiding principles.
  - \*With the protection offered by the laws referenced to in comment 1 above, the local planning boards offer the best vehicle for making decisions at the lowest practicable level of government.
3. Create a system of public decision-making that clearly outlines the responsibilities of developers and public officials to reach decisions on use of coastal resources in a timely manner, consistent with an adequate assessment of the effects of proposed development on coastal resources.
  - \*The public system clearly exists on the local level through the vehicle of the local planning boards and zoning boards. The "Sunshine Law" reinforces not only the right, but the practical aspects of making all decisions regarding land use public.
4. Provide information in understandable terms to citizens, interest groups and public agencies about uses of coastal resources.
  - \*Information is best provided by the DEP to the local governments who in turn notify the public at the public meetings.

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4. Provide information in understandable terms to citizens, interest groups and public agencies about uses of coastal resources.
  - \*Information is best provided by the DEP to the local governments who in turn notify the public at the public meetings.

5. The expectation of some property owners may, however, be affected by coastal management decision, policies and regulations made in the broad public interest.

\*Until the rights of property owners are clearly determined by the present cases in court (relating to Wetlands and Riparian Rights), there is no sense in increasing the court load through a coastal zone.

It is not our intent to criticize without constructive comments. During a one week time span in 1977, I had occasion to attend two public meetings, one in Salem County and one in Camden County regarding the regulation of our flood sensitive area in Gloucester County. These meetings were chaired by DEP personnel and neither knew that the other meeting, a public meeting with the attendant public notices, was taking place. Since the DEP can't presently coordinate and administer these policies then I strongly suggest a major housecleaning is in order. As you suggested in the September '78 issue of the "Jersey Coast" ("OCZM plans to refine these ideas and invites your written comments") we wish to make the following suggestions:

1. That the OCZM be designated by the DEP as the sole reviewer and approval agency for permits relating to wetlands, riparian law, and stream encroachment.
2. That where multiple permits are required (e.g. wetlands/stream encroachment) a one permit process be initiated with a reasonable time table for approval (60 days).
3. OCZM complete the mapping required by HUD for Flood Hazard Areas.
4. That one through three above be accomplished without any formal extension of CAFRA nor with any quasi-CAFRA area.

We feel this will be consistent with Federal law and will enable the DEP to receive the appropriate grants.

In November of 1978, the Division of Marine Services supplied a handout and listed seven items the extension of CAFRA could provide to the Delaware River Area. These suggestions and or comments are as follows:

1. A set of detailed policies describing what types of development projects will be approved under existing state permit programs including Waterfront Development (riparian) Permits, Wetlands Permits, Stream Encroachment Permits, and water and air quality permits. This set of policies will also be used as a basis for awarding state-administered grants, such as Green Acres or Shore Protection.

\*This is not necessary because the existing permit programs are quite clear as to how to develop the land and it is the purview of local zoning laws to promulgate how to use the land. As presented this would lead to State Zoning via the DEP.

\*COMMENT

Pureland Industrial Complex

2. A guarantee that most actions by federal agencies will be consistent with New Jersey's coastal program.

\*In this area, Gloucester County, this guarantee is being provided by the Delaware Valley Regional Planning Commission. Gloucester County has Freeholder representation on that commission. DEP's suggestion creates governmental redundancy.

3. A set of consistent policies and a detailed method for making decisions regarding development proposals in, or near coastal waters, which can be used as an advisory or decision-making tool by municipal, county and regional agencies.

\*In this area, Gloucester County, fair guarantee is being provided the Delaware Valley Regional Planning Commission. Gloucester County had Freeholder representation on the commission. Once again, DEP's suggestion creates governmental redundancy.

4. Small amounts of funds for studies or projects related to coastal issues to help better use the coast. The "Beach Shuttle" to Island Beach State Park is an example of such an experimental project.

\*We feel the reference to the "Beach Shuttle" is being overworked and some new reference should be cited. In addition there are Green Acres funds available and funds from local conservation groups or endowments such as the Stewart Fund.

5. Funding to municipal, county and state agencies under the Coastal Energy Impact Program (CEIP) to plan for the impacts of energy development.

\*The CEIP is a separate issue and is not directly relative to this issue.

6. Funds to help increase public access to waterfront areas.

\*Once again, there are other sources of such fundings.

7. Funding which can be passed through to municipal or county governments for planning for the development and protection of coastal areas. Twelve New Jersey counties have already received grants under this program. The funding could be applied to specific projects such as design of a waterfront park or bicycle path, updating the waterfront element of a municipal master plan, or other projects.

\*We feel a county such as Gloucester with a funded planning staff is better off without state funding and the attendant influence and limitations attached to using those funds.

\*COMMENT

Charles Romick  
Gloucester Cr. Planning Board  
Dear Chuck,

These are my thoughts on the public meeting held by the DEP to discuss options for the Gloucester Co. river front.

Many people showed a strong desire to see part of the waterfront set aside for public use and access to the Delaware River. No one opposed this, but some thought that local municipalities could accomplish this with no need for help from the State. They argued in favor of Home Rule.

The problem is that Home Rule has done little to preserve public access to the river. The Delaware River is a resource of state-wide significance, so the State should be involved in acquiring public access to the river. Local municipalities are more interested in exploiting the economic benefits of the river than in protecting the public's right to recreational use of the river. Practically the entire riverfront is zoned for industry. The river had been so foul for so long that people didn't think of it in terms of swimming and fishing.

But, Federal law mandates that the river be fishable and swimmable by 1983. Already the river is being cleaned up. I sail on both the Delaware River and the Chesapeake Bay. The Delaware is now clearer than much of the Chesapeake. The cost of the clean up is being borne by the public. Therefore, they have a right to access to the river. When the river gets a little cleaner, there will be a need for bathing beaches, boat ramps and perhaps a marina. If all the riverfront land that industry is not now actively using was to be set aside for public use, it would barely be enough. But, if industry is allowed to build up these last few parcels of land, then the public will be denied the use of this valuable recreational asset.

We are faced with the urgent task of acquiring the remaining riverfront for public use. I am not against extending CAFRA to Gloucester Co., but it will take more than this to accomplish what must be done.

Specifically, that section of the riverfront between the Mantua Creek and Red Bank Park should be acquired. Currently there are plans for an LNG terminal by Tenneco, and a tank farm by GATX for this parcel. Neither of these is in the best interest of the public. The LNG terminal has been clearly shown to pose an unacceptable threat to all persons living within several miles of the area. The GATX tank farm would release up to 100 tons of hydrocarbon vapors into an area where the air pollution from hydrocarbons is already too high. The State has said that the existing level of hydrocarbon pollution is unacceptable and must be reduced. A new tank farm would add to and not reduce this pollution. The other piece of ground that should be set aside for non-industrial use is the Cedar Swamp and the adjacent riverfront.

The preserving of these parcels is a project that will require the cooperation of State and local governments, with perhaps Federal help also.

David Caccia

*David Caccia*



# Rules for land along river in county questioned

By JOE DIENNER  
Of The Times Staff

**GREENWICH TWP.** — Environmentalists want to protect some of Gloucester County's riverfront for recreation. Industrialists don't want to be hassled by government any more than they already are and municipal officials want to protect home rule.

All sides brought their concerns to a public hearing here Thursday night concerning a preliminary state plan to regulate future development along the Delaware River plus several miles inland.

While not universal, the consensus of those present was that the state Department of Environmental Protection (DEP) could provide technical information and guidelines

but the final decisions on zoning should be left in local hands.

The hearing drew 34 participants from more than six towns, some of them removed from the riverfront.

Woolwich Township Mayor Albert C. Stecher Jr., for example, noted that a preliminary map of the proposed new coastal zone bisects some of his town's "high dry farmland." "What that has to do with coastal protection I can't figure out," he told a trio of DEP officials.

Similarly, Gloucester County Senior Planner Charles E. Romick applauded DEP's plan to simplify its rules governing coastal development. But he questioned the agency's proposal to expand its jurisdiction over "coastal areas" that are actually 10 to 15 miles

inland. He noted areas such as the county courthouse in center city Woodbury are included in the preliminary coastal zone map offered by DEP.

Besides the boundary dispute, many of the residents questioned whether additional development guidelines are needed at all, especially since about 85 percent of the county's shoreline is already owned by industry and much of it is developed.

Pausshore zoning board chairman Robert Gilcrest suggested that instead of creating new laws, DEP could help the riverfront most by enforcing existing anti-pollution laws. "If the fishing industry comes back the recreation will follow and everybody will benefit," Gilcrest said.

Manitowick Township Environmental Commission Member David Cacchia, however, said without strong conservation along the public will not have access to the river's recreational opportunities which will expand as the quality of river water improves. "If

industry has the chain up all along the river the people won't be able to get in," Cacchia said.

Two industry representatives insisted they already deal with enough government red tape. "Another super regulatory agency is the last thing we need," said A. Carl Helwig, president of Logan Township's Pureland Industrial Complex.

And privately, Jack Crandall, director of the county's industrial development council, commented, "They (DEP) worry about fish and they worry about wildflowers but they don't worry about the people whose jobs are here." He added sarcastically, "Big Brother has got to know more about what's good for us than we know ourselves."

Municipal officials were also concerned about DEP's expanding authority. Kenneth A. DiMuccio and Samuel J. Leone, both attorneys and Greenwich Township officials, maintained DEP has not shown the need for an expanded coastal

protection zone. Pausshore Mayor John Burzibelli added, "I believe in home rule. We should be the ones making the decisions."

David Kinsey, chief of DEP's office of coastal zone management, explained that the proposal will extend coastal protection north along the Delaware as far as Treden and on North Jersey waterfronts. DEP already controls development along the Jersey shore and up the Delaware River as far as the Delaware Memorial Bridge plus controlling the

immediate riverfront areas through wetlands laws and riparian rights. If approved, he said, the new plan would standardize the rules for granting riverfront development rights, thereby making the application process easier.

He added that the exact rules governing the new zones and boundaries are open for consideration. Kinsey's office expects to prepare tentative proposals by the spring and submit plans for DEP approval next summer.

## RESOLUTION

WHEREAS; The New Jersey Department of Environmental Protection has proposed a Coastal Zone Management Program for the Delaware and Hudson River waterfront areas.

WHEREAS; major areas along the Delaware River and its tributaries of tidal influence have been proposed for inclusion into the Coastal Zone Management Program, including all or at least part of thirteen municipalities in Gloucester County.

WHEREAS; the proposed Coastal Management Program would establish various location, use, and resource policies in order for the Department of Environmental Protection to evaluate proposed major development within the proposed coastal zone.

WHEREAS; the New Jersey Department of Environmental Protection presently has no direct legislative authority to implement Coastal Program policies within large areas of the Coastal Zone that it has proposed in the County.

WHEREAS; the enforcement capabilities of the New Jersey Department of Environmental Protection to implement coastal policies for large areas of the County in absence of legislated authority are seen as questionable.

WHEREAS; the implementation of the Coastal Management Program within large areas of the County is seen as a potential unnecessary interference by the New Jersey Department of Environmental Protection with directions of growth chosen by the County's local governments.

NOW, THEREFORE, BE IT RESOLVED by the Gloucester County Planning Board that the implementation by the New Jersey Department of Environmental Protection of a Coastal Management Program should be limited in Gloucester County to areas of its legislative authority, such as riparian lands and wetlands, as recommended in the Board's State/County Coastal Coordination Project Report.

7/11/78  
DATE

Ralph J. Reynolds  
CHAIRMAN

Angie M. [unclear]  
SECRETARY

## BIBLIOGRAPHY

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2. Gloucester County Housing Needs Study 1973-1985, July, 1976, Gloucester County Planning Department
3. Gloucester County Land Use Update - 1975, September, 1976, Gloucester County Planning Department
4. Gloucester County Outer Continental Shelf and Energy Facilities Planning Study, January, 1978, Gloucester County Planning Department
5. Natural Resources Planning Study, June 1977, Gloucester County Planning Department
6. State of New Jersey Coastal Management Program Bay and Ocean Shore Segment, Draft Environmental Impact Statement, May 1978, New Jersey Department of Environmental Protection, Office of Coastal Zone Management
7. Master plans and zoning ordinances of the following municipalities:  
Deptford, East Greenwich, Greenwich, Mantua, National Park, Logan, Paulsboro, Swedesboro, Wenonah, West Deptford, Westville, Woodbury, Woolwich

